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(54) Title: SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT

(57) Abstract

Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.

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SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT

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Technical Field

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

Background

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more just a scientific curiosity. For example, identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

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At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types molecules are referred to generally herein polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the The term codon is also used for the message (anticodon). corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

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The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in Double stranded cDNA carries all chromosomes. Each base of the first strand is information of a gene. joined to a complementary base (hybridized) in the second The linear DNA molecules in chromosomes have strand. distributed along their thousands of genes length. Chromosomes include both coding regions (coding polypeptides) and noncoding regions; the coding regions. represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, uninterrupted polypeptide-coding sequence, and י 3 untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be than the polypeptide-coding sequence. untranslated regions typically have many, randomlydistributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, Ann. Rev. Neurosci. 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

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The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total In contrast, cDNA (which is only made from the DNA. transcription product of active genes) is one-half to three-(the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

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Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., Nature 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

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Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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regions and coding regions of chromosomes is of significant There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

SUMMARY OF THE INVENTION

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Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed in vivo. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., Science 245:1434 (1989)), ESTs point directly to expressed genes.

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Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

I. ESTs from cDNA Libraries

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The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone According to the present method, ESTs are selection. generated from partial DNA sequencing of the selected clones. The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing While single sequencing reactions may have an reaction. accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR primers.

Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot found by cDNA cloning and EST sequencing. amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been The exon amplification method can be used directly with the cosmid and YAC clones frown human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, ESTderived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known β -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction. which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., Nucl. Acids Res. 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately proportions in the library (Patanjali et al, Proc. Natl. Acad. Sci. USA 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

II. Complete Coding Sequences from ESTs

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The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

- 1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.
- 2. Radiolabel the isolated insert DNA, e.g., with ³²P labels, preferably by nick translation or random primer labeling.
- 35 3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

- 4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.
- 5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.
- 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full length cDNA.

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An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript, followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with P32 using polynucleotide kinase using labelling methods known to those with skill in the art (Basic Methods in Molecular Biology, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

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The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R, Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., Methods: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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Gocayne, J.D., Ward, D.C., and Venter, J.C. Genomics 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

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Using the sequence information provided herein, polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or In addition, the invention includes the as DNA probes.) entire coding sequence associated with the polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

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The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately 106-fold purification of the native message. Purification of starting material or

natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences. Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

III. DNA Constructs

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The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example. Bacterial: pBs, phagescript, \$\phi\$X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene);

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Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenical transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P_R , and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., Basic Methods in Molecular Biology, (1986)).

The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTS have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

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Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

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PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with flow-sorted preselection labeled chromosomes and hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., Human Chromosomes: a Manual of Basic Techniques. Pergamon Press, New York (1988).

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Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, Mendelian Inheritance in Man (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

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Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, Nucl. Acids Res. 6: 3073 (1979); Cooney et al, Science 241: 456 (1988); and Dervan et al, Science 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, J. Neurochem. 56: 560 (1991); Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression, CRC Press, Boca Raton, FL (1988)). Triple helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect. He high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional DNA markers for RFLP.

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However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST. These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against DNA from an individual can be compared identification purposes. Because greater numbers polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ α class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

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(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the $DQ\alpha$ class II HLA gene.

The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. sequences targeted to noncoding regions (see, e.q., Tables 8 and 9) are particularly appropriate. As mentioned above, actual base sequence information used for can identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

V. Production of Polypeptide Corresponding to ESTs

As previously explained, each EST corresponds not only to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

At the simplest level, the amino acid sequence encoded by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide can be inserted into a host organism and expressed. organism can be a bacterium, yeast, cell multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA) can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., Science 247:1465 (1990); Felgner, et al., Nature 349:351 (1991). Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide. Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

VI. Examples

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Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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EXAMPLE 1

<u>cDNA Sequences Determined by Random</u> <u>Clone Selection: First set</u>

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METHODOLOGY:

With reference to the data presented in Table 1, lambda libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1. Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5 μ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5 μM each dNTP, and 0.1 μ M each primer for 35 cycles: 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, Nature 347: 310 (1990) hereby incorporated by reference).

RESULTS:

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Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, Neurochem. 48: 307 (1987); Fargnoli et al, Anal. Biochem. 187: 364 (1990); Duquid and Dinauer, Nucl. Acids. Res. 18: 2789 (1990); Schweinfest, et al, Genet. Anal. Techn. Appl. 7: 64 (1990); Travis and Sutcliffe, Proc. Natl. Acad. Sci. USA 85: 1696 (1988); Kato, Eur. J. Neurosci. 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, Genet. Anal. Techn. Appl. 7: 64 (1990); Sive and St. John, Nucl. Acids Res. 16: 10937

(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOs 1-315.

TABLE 1. cDNA Library Composition Determined By Random Clone Sequencing

-----cDNA Library------

EST Category	Hippocampus <u>Number</u>	ampus <u>Percent</u>	Hippocampus Number	Hippocampus Subtracted	Number	Fetal Brain <u>Percent</u>	Temporal Cortex <u>Number</u>	Cortex
Databases MatchHuman Mitochondrial Genes Repeats: Alu, Line-1, etc. Ribosomal RNA Other Nuclear Genes Database MatchOther No Database Match poly A Insert No Insert	48 39 32 33 53 53 7	2.7 2.7 2.7 3.8 3.6 6.6 6.3 1.4 1.3	10 7 7 7 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	w 40 4 W 00 0	7.9 15.8 0 10.5 13.2 52.6 0	6 4 0 11 0 6 27 8 27 8 27 8 27 8 27 8 27 8 27 8 27	7.5 0 13.8 0 0 5.0 5.5 33.7
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EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. Science, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal. brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. Nucl. Acids Res. 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. hippocampus and fetal brain library totals include data from Adams et al Science 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. Science

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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. Nature 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. Biochem. Biophys. Acta 910: 203-212 (1987)) were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. Mol. Biol. 215: 403-410 (1990)) server at the National Center Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene · identification (Barker, W., George, D., Hunt, Garavelli, J. Nucl. Acids Res. 19 (Suppl): 2231-2236 (1991)) for the EST were assigned. ESTs without significant matches . using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base expressed D-segment numbers for these clones are DOS1E -D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

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EXAMPLE 3

EST Characterization: First Set

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ESTs including SEQ ID NOs 1-315 were analyzed Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. Comput. Appl. Biosci. 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology. Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide comparisons (Altschul et al, J. Mol. Biol. 215: 403 (1990)). the National Center for PIR searches were run on Biotechnology Information BLAST network service. programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Peqarson and Lipman, Proc. Natl. Acad. Sci. USA, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

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On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase F_0 S-subunit and porcine aconitase were also found (Table 2). specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide phosphodiesterase (2 ESTs), calmodulin, c-erbA- α -2, $G_S\alpha$, and Na^+/K^+ ATPase $\alpha\text{-subunit}$. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes, including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEO ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102) matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270 matched the three ß-tubulin genes with 88-91% identity and

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EST00271 (SEQ ID NO:248) matched α -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the Drosophila genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the Drosophila genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing Drosophila embryo (Campos-Ortega, Trends in Neuro. Sci. 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. J. Mol. Biol. 215: 403 (1990)). (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein & subunit- and yeast cdc4-like elements (Hartley et al, Cell 55: 785 (1988); Klambt et al. EMBO J. 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the Xenopus Notch homolog, Xotch. In Drosophila, Enhancer of split absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, Neuron 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST: ß-

actin (3), λ -actin (2), α -tubulin (2), α -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

Example 4

EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOS 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as E. coli, yeast, C. elegans, Drosophila, barley, Arabidopsis, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., supra), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in Drosophila are represented by similar human ESTs, including seven in absentia (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. Nature 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. Cell 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. Genes. Dev. 4: 1516-1527 (1990)). New members of gene families previously known in humans include a Ca⁺²-transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. Proc. Natl. Acad. Sci. USA 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

Table 2: ESTs Identified by Database Matches

200 EST00250 60K filarial antigen A28209 PIR 108 56.9	SEQ ID EST# Putative Identification	Accession DB Len %10
2320 EST01784 60K filarial antigen A28209 PIR 88 50.6	·	
969 EST01982 ADP-ribosylation factor 1 B33283 PIR 84 41.2 1834 EST01620 AMP deaminase, brain		
1834 EST01620 AMP dearminase, brain A37056 PIR 57 100.0 97 EST00289 Aconitase A35544 PIR 105 90.6 251 EST00370 Actin, other S10021 PIR 44 51.1 248 EST00271 Actinin, alpha HUMACTAR GB 271 85.3 891 EST01891 Actinin, alpha HUMACTAR GB 271 85.3 891 EST01891 Actinin, alpha HUMACTAR GB 271 75.0 132 EST00110 Agrin RATAGR GB 269 82.2 1852 EST01625 Agrin RATAGR GB 103 84.6 1094 EST02113 Ala HUMALA GB 92 82.8 691 EST00675 Alcohol dehydrogenase RICGOS2G_1 GPU 38 59.0 1965 EST01664 Amyloid A4 HUMAFPA4 GB 135 91.9 2068 EST01694 Amyloid A4 HUMAFPA4 GB 135 91.9 2078 EST01694 Amyloid A4 HUMAFPA4 GB 135 91.9 2082 EST01700 Anion exchanger homolog AE3 A33638 PIR 95 97.9 1492 EST0250 B cell-specific Mo-MLV integration site 1 (bmi-1) MUSBMI1A GB 87.1 1492 EST0250 Cadherins CADNSHUMAN SP FIR 69 87.1 133 EST00247 CAMP-dependent protein kinase inhibitor MUSPKI GB 234 91.5 1348 EST02265 Cadherins CADNSHUMAN SP 41 45.2 135 EST01466 Calmodulin CAMP-regulated phosphoprotein B35308 PIR 21 86.4 136 EST01666 Ca2+ transporting ATPase RATCALB28 B8 81 87.8 1309 EST01325 Calcium channel S05054 PIR 33 67.6 1910 EST01665 Calmodulin PICCOFIL GB 132 89.5 1309 EST01257 Diacylglycerol kinase, type II, beta A26464 PIR 93 98.9 131 EST01041 Caldindin D2B RATCALB28 B8 81 87.8 132 EST02362 Estnotate Diamine acetyltransferase A30047 PIR 86 58.6 130 EST00377 Fo ATPase beta subunit, mitotohondrial S0VMTASS GB 293 85.4 132 EST02362 G Abinding protein, beta subunit, mitotohondrial S0VMTASS GB 293 85.4 132 EST02362 G Abinding protein, beta subunit, mitotohondrial S0VMTASS GB 293 85.4 132 EST02362 G Abinding protein, beta subunit, mitotohondrial S0VMTASS GB 293 85.4 132 EST02362 G Abinding protein, beta subunit, mitotoh		
37 EST00289 Aconitase A35544 PIR 105 90.6	· · · · · · · · · · · · · · · · · · ·	
251 EST00370 Actin, other S10021 PIR 44 51.1	•	
Section		
### BST01891 Actinin, alpha		
1500 EST02538 Actinin, alpha HUMACTAR GB 271 75.0 132 EST00110 Agrin RATAGR GB 269 82.2 1852 EST01625 Agrin RATAGR GB 103 84.6 1094 EST02113 Ala HUMALA GB 92 82.8 691 EST00675 Alcohol dehydrogenase RICGOS2G_1 GPU 38 59.0 1965 EST01664 Amyloid A4 HUMAFPA4 GB 135 91.9 1965 EST01664 Amyloid A4 A29030 PIR 52 54.7 2068 EST01694 Amyloid A4 A29030 PIR 52 54.7 2068 EST01694 Amyloid A4 A29030 PIR 52 54.7 2079 EST01700 Anion exchanger homolog AE3 A33638 PIR 95 97.9 1880 EST01634 Axonal glycoprotein TAG-1 A34695 PIR 69 87.1 1492 EST02530 Bib protein S09699 PIR 57 53.4 13 EST00255 Cadherins CADN*HUMAN SP 41 45.2 1348 EST02378 CAMP-dependent protein kinase inhibitor MUSPKI GB 234 91.5 1318 EST01441 CAMP-regulated phosphoprotein B35308 PIR 21 86.4 1413 EST02447 CAMP-specific phosphodiesterase HUMPDEAA GB 363 69.0 236 EST01443 COPdiacylglycerol-serine O-phosphatidyltransferase HUMPDEAA GB 363 69.0 236 EST01465 Calmodulin dependent protein kinase, type II, beta A26464 PIR 93 98.9 23 EST01913 Clathrin coar assembly protein AP50 homolog YSCYAP54 GPU 62 63.5 2400 EST01676 Cofilin PIGCOFIL GB 132 89.5 2400 EST01676 Cofilin PIGCOFIL GB 132 89.5 2400 EST01676 Cofilin PIGCOFIL GB 132 89.5 2401 EST02477 Diamine acetyltransferase ATDA*HUMAN SP 74 45.3 2402 EST01325 Enhancer of split A30047 PIR 86 58.6 2403 EST00377 Fo ATPase beta subunit, mitochondrial BOVMTASB GB 293 85.4 2403 EST02326 GA binding protein, beta subunit MUSGAC_1 GPU 86 90.8		
132 EST00110 Agrin		
1852 EST01625 Agrin		
1094 EST02113 Ala	•	
ST00675 Alcohol dehydrogenase RICGOS2G_1 GPU 38 59.0		
2408 EST00244		
1965 EST01664 Amyloid A4		
2068 EST01694		
2092 EST01700 Anion exchanger homolog AE3 A33638 PIR 95 97.9		
1880 EST01634		
1492 EST02530 B cell-specific Mo-MLV integration site 1 (bmi-1) MUSBMI1A		
1277 EST02306 Bib protein S09699 PIR 57 53.4 13 EST00255 Cadherins CADN\$HUMAN SP 41 45.2 1348 EST02378 cAMP-dependent protein kinase inhibitor MUSPKI GB 234 91.5 1391 EST01041 cAMP-regulated phosphoprotein B35308 PIR 21 86.4 1413 EST02447 cAMP-specific phosphodiesterase HUMPDEAA GB 363 69.0 396 EST01443 CDPdiacylglycerol-serine O-phosphatidyltransferase JH0368 PIR 33 41.2 1956 EST01663 Ca2+ transporting ATPase 2 B28065 PIR 125 88.9 1126 EST02146 Calbindin D28 RATCALBD28 GB 81 87.8 1039 EST02055 Calcium channel S05054 PIR 33 67.6 1910 EST01645 Calmodulin RATRCM1 GB 120 90.1 485 EST01466 Calmodulin-dependent protein kinase, type II, beta A26464 PIR 93 98.9 13 EST01913 Clathrin coat assembly protein AP50 homolog YSCYAP54_1 GPU 62 63.5 2004 EST01676 Cofilin PIGCOFIL GB 132 89.5 2400 EST01824 Cysteine-rich intestinal protein GYRTI PIR 56 66.7 1588 EST02633 D2223 repetitive DNA HUMREP GB 160 76.4 2192 EST01257 Diacylglycerol kinase, lymphyocyte S09156 PIR 44 42.2 141 EST02477 Diamine acetyltransferase ATDA\$HUMAN SP 74 45.3 650 EST00642 Dilute (myosin heavy chain) MUSDILUTE_1 GPU 27 100.0 2302 EST01779 Discs-large tumor suppressor DRODLGA_1 GPU 53 63.0 188 EST00256 Enhancer of split A30047 PIR 86 58.6 289 EST00377 Fo ATPase beta subunit, mitochondrial BOVMTASB GB 293 85.4 1332 EST02362 GA binding protein, beta subunit MUSGAC_1 GPU 86 90.8		
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1332 EST02362 GA binding protein, beta subunit MUSGAC_1 GPU 86 90.8		BOVMTASB GB 293 85.4
		MUSGAC 1 GPU 86 90.8
1007 ESTUDOZO GAMINO-BMINODUTYNC BCIG Transporter ASSSTO PIK 20 59.3	1667 EST00825 Gamma-aminobutyric acid transporter	A35918 PIR 26 59.3
2217 EST01738 Gelation factor ABP-280 A37098 PIR 74 80.0		A37098 PIR 74 80.0
1412 EST02446 Glutamate-aspartate carrier protein JV0092 PIR 57 37.9		JV0092 PIR 57 37.9
1020 EST02034 Glutaminase GLS\$RAT SP 34 74.3		GLS\$RAT SP 34 74.3
1885 EST01639 Histocompatibility antigen modifier 1 A37779 PIR 63 75.0	·	A37779 PIR 63 75.0
1495 EST02533 Hypothetical 43.5K protein JU0319 PIR 43 52.3		JU0319 PIR 43 52.3
2326 EST01791 Inositol-1,4,5-trisphosphate 3-kinase JN0129 PIR 65 68.2	· · · · · · · · · · · · · · · · · · ·	
SEQ ID EST# Putative Identification Accession DB Len %ID		Accession DB Len %ID

	
724 EST01529 Interferon-induced 54K protein	INI4\$HUMAN SP 76 70.1
1035 EST02051 J1 protein	MUSJ1PRO GB 362 85.7
1229 EST02258 KUP protein	HUMKUPMR 1 GPU 54 36.4
993 EST02007 Kinase 5 protein	CHKCEK5_1 GPU 68 94.2
77 EST00257 Kinesin	A35075 PIR 57 86.2
78 EST00258 Kinesin	A35075 PIR 62 47.6
2245 EST01748 Kinesin	A35075 PIR 98 52.5
2282 EST01764 Lamin B receptor	A36427 PIR 76 71.4
2173 EST01724 Lon protease	JQ0901 PIR 103 41.3
1427 EST02463 Long-chain-fatty-acid-CoA ligase	A36275 PIR 36 62.2
313 EST00276 Lysosomal membrane glycoprotein 1 (L	AMP-1) A31959 PIR 53 46.3
161 EST00247 MARCKS (myristoylated alanine-rich pro	
1386 EST02418 MARCKS homolog	MMF52 EU 237 92.4
769 EST00734 MARCKS homolog	S08341 PIR 61 40.3
43 EST00371 Maternal G10 protein	S05955 PIR 38 92.3
1468 EST02505 Matrin 3	RATMATRIN3 GB 137 93.5
639 EST00632 Membrane transport superfamily (GTP-c	dependent) A24400 PIR 63 39.1
1894 EST01643 Membrane transport superfamily (GTP-	· ·
824 EST01865 Microtubule-associated protein 1B	RATNEU GB 293 86.4
223 EST00368 Microtubule-associated protein 1B	A33645 PIR 30 54.8
2032 EST01683 Microtubule-associated protein 1B	A33645 PIR 49 62.0
2017 EST01678 Milk fat globule membrane protein	A36479 PIR 48 61.2
1704 EST01580 Myeloid differentiation primary respons	e gene MyD1 MUSMYD118 1 GPU 76 88.3
2226 EST01744 NAD(P) + transhydrogenase (B-specific	
1567 EST02610 Neural cell adhesion molecule L1	S05479 PIR 82 43.4
506 EST01471 Neuraxin	S06017 PIR 120 84.3
1566 EST02609 Neutrophil oxidase factor	A34855 PIR 43 47.7
952 EST01961 Notch/Xotch	HUMTAN1_1 GPU 85 57.0
227 EST00259 Notch/Xotch	A35844 PIR 74 B5.3
1395 EST02429 Nuclear factor 1-like protein (NF1)	HAMNF1A GB 111 92.0
1681 EST01573 Nucleoside diphosphate kinase	A33386 PIR 71 52.8
346 EST01828 Old homeotic protein	A35912 PIR 35 52.8
. 2254 EST01751 Phosphatidylinositol-4,5-bisphosphate	phosphodiest A28807 PIR 40 90.2
1869 EST00992 Polymyxin B resistance	A32714 PIR 20 76.2
93 EST00287 Processing enhancing protein	S03968 PIR 96 58.8
2353 EST01806 Prohibitin	RATPROHIB_1 GPU 120 97.5
2297 EST01775 Prohormone cleavage enzyme	MUSMPC1A_1 GPU 91 93.5
9 EST00376 Prolyl endopeptidase	PIGPREP GB 223 83.9
1069 EST02087 Protein kinase C, zeta	HUMPKCL GB 3B2 58.7
1933 EST01650 Protein phosphatase 2A beta subunit	HUMPROP2AB GB 288 76.8
202 EST00298 Protein-tyrosine phosphatase LRP	LRP\$MOUSE SP 62 44.4
1654 EST01572 Protochlorophyllide reductase	S04783 PIR 34 57.1
38 EST00374 RNA polymerase II 6th subunit (RP026)	A36352 PIR 72 75.3
1478 EST02515 Rab5	F34323 PIR 91 82.6
2368 EST01389 Radial spoke protein 3	S05962 PIR 58 52.5
37 EST00038 ras p21-like small GTP-binding protein (s	smg GDS) BOVSMGGDS GB 131 89.4
180 EST00299 ras-related proteins	S10493 PIR 51 46.1
1700 EST01579 Retrovirus-related gag polyprotein	FOHUE2 PIR 95 77.1
1511 EST02550 Retrovirus-related pol polyprotein	GNLJGL PIR 50 54.9
102 EST00248 rho H12/ ARH12	BOVBGBRH GB 195 79.6
1715 EST01583 Ribosomal protein L18a	R5RT18 PIR 68 95.7
SEQ ID EST# Putative Identification	Accession DB Len %ID

			-				*
1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1	
		Ribosomal protein L3	JQ0771	PIR		80.0	
		Ribosomal protein L30	R6RT30	PIR		96.5	
		Ribosomal protein S10	R3RT10	PIR		7.0	
		Ribosomal protein S10	R3YM10	PIR		51.4	
463	EST01459	Ribosomal protein YL10	S11581	PIR	40		
1408	EST02442	Seven in absentia	A36195	PIR	46 8	8.0	
299	EST00249	smg p25A GDP dissociation inhibitor	A3565	2 P	IR 9	7 77.	.5
		Spectrin, beta	HUMSPTB	GB 2	68 6	7.7	
2089	EST01699	Sperm membrane protein	A35981	Pil	3 52	58.5	;
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSI	DHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSE	OHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUM	IAN S	P 2	7 53.	.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79 8	1.2	
		Thiosulfate sulfurtransferase (rhodanese	e) ROBO	PI	R 65	81.8	3
		Transforming protein (dbl)	TVHUDB	PIR	25 (65.4	
	EST00282		A35104 PIF	33	67.6		
		Tubulin, alpha	HUMTUBAG	GB	223	75.0	
		Tubulin, beta	HUMTBB5	GB 2	98 9:	3.6	
		Tubulin, beta	HUMTUBBM	GB	217 9	90.4	
		Tubulin, beta	A26561	PIR 10	5 88	.7	
		Tyrosine kinase	HUMECK	GB	384 7	74.3	
	EST00853				6 45		
		Valine-tRNA ligase	A29871		56 5		
		Wilm's tumor-related protein	MDMUH	GB		99.6	3
		XPR2 alkaline extracellular protease	826955	PIR		46.1	
249	EST00275	Zinc Finger Proteins	S06551		5 57		
		Zinc Finger Proteins	S00754		5 60		
		Zinc Finger Proteins	C32891		4 54		
		Zinc Finger Proteins	S00754		05 67		
		Zinc finger proteins	S00754		1 62		
		Zinc finger proteins			0 .45		
2324	E5101352	Zinc Finger Proteins	S10397	PIR :	29 56	5.7	

There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the β -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. **Proc. Natl. Acad. Sci., USA 83**: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P, Ervin, S., Applegren, N., Wiest, L. & Pegg, A. J. Biol. Chem. 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. Genomics 7:491-502 (1990)).

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EXAMPLE 5

Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

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The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., <u>PCR Technology; Principles and Applications for DNA Amplification</u>. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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these regions are less likely to prime other members of a gene family or pseudogenes.

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The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCu of a ³²P-labeled deoxycytidine triphosphate. was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., Genomics 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

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The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER_#1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	ī	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	ī	GCCATTGTGCTGAATAGAGT	GTTAGTGTTTCCTTAGCAAG
. 83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	ī	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	ī	CTTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	ī	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	ī	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGTT
141	EST00118	ī	CTCAGAGAAACTTAGGTGAA	CTACAGAATCATTTCACCAG
220	EST00372	ī	AAGTTGCACATTGCCCAAGG	
237	EST00187	ī	TTACAAATTTCTCTTGACGC	ATAGTACTGCAAGGTTATTC
242	EST00192	ī	GGATCAGATAATCAAACAGG	CTGAAGGAGCACAGTTTCTC
259	EST00202	î	GCATCACAGTTTAACTGAGG	GCTTAGGATATGAATGCATA
269	EST00293	ī	CTGTTGCTGTGCAGTAGCTT	CTACATATTTGTGCCTCCTT
299	EST00249	ī	GATCATGCAGACGTAGATAT	CTTTTGACCCAGTGAAACTT
1651	EST00249	i	TAGTCGCTGTAAGTTGATTC	CCAACTCCTGCCAGATCATT
16	EST00010	2	CAGGCAAGTTCTTCCAGGA	GCTTTGCTGGATGCTTCATT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	TCAGACCCATGGTCAGCTT
8	EST00234	2	TAGAAGGCAAACTATGTCCC	CCCTCAGCTTAGGGGAATG
36	EST00234	2		GGTTGAGGATTGGCTTTTAC
123			AGCCAGAAGGCTGCTTAAAG	GCAGTGAACCAGTACTCCTA
192	ESTO0106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
200	ESTO0155	2	GATTTATGTCTGGGAACTAA	GCAGCATGTGAAAGAATGAT
284	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
	EST00216	2	CCTAAGAATTCGTTTGGCTC	GTCTGGCACATAATAGATTTG
102 167	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
12	EST00138	3	AAACAGCTGCGGAGTACA	AAAGGATCCTCCACTCCAGA
—	EST00274	3	CCTAGCAAACTCATACACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACTCTGTCAACAGTG	TGTAAAACAAAGGCCAAACT
108	EST00094	3	AL2-GCAGGATGTCAGTCTTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2-GCAGGATGTCAGTCTTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
. 6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2-GGAAGTACAGGATTTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2-TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2-CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAAGG

			•	• •
SEO ID	EST#	<u>Chr</u>	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCGTÁCAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCTCAAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2-ACCCAGTTCTCAAAGACC	GGTTTACCATTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTCAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTCGT
1680	EST00838	7	AL2-GTTCTTTCCCAGGTATGC	TTGTTGGTACTGAGGAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
. 134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCCTTTTGTCC
1645	EST00804	1.0	CTCCTTTGGGACAAACAACT	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCCTGAGAGATGCA	CCTTGTGAAGAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTTCTTACTCTC	TATGCTGATTGTTTGCACTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACTCTGTAGTGTTCTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTCC	TAGGGCCACCTCCAGTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2-CTAACCACACCCACACATTG	CCTCAGCACAAGAGAAGAATGG
7	EST00014	12	AACTTGCAACATAAATACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCCTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224 ·	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTCAGAATTAAGAGGTCT	GTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTC	GTCATGCTAGTAAACTTACAC
1689	EST00845	14	AL2-AGGAGGAAGCTGAAATCC	GGAAGTCCATAAGAGACTCACC
95	-	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACTCT
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16.	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACGCGTGGCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2-TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTCGGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTCAGGAA
136	EST00113	20	AL2-TCGGAGAAGTTGCAGTTTCTG	GTTAAAAGCTGTTAGACGGGGC
120	EST00103	- 22	CACTGACTGACTCCTCTTTA	GGAACCGTAACTCTCCATAG
313	EST00276	x	ATTGACCTTCAATGTAATAA	TTGGATTGGGCAAAATAG
· -				

SEO ID	EST#	<u>Chi</u>	PRIMER #1	PRIMER #2
162 1669 1917 1708	EST00133 EST00827 EST01029 EST00858	X X X	ATGTGAGCATCTATACCTGC CGGACAACTAGGATAAATGC GAATAGCATTATTAGCCAGT AL2-AAGGCGAGGATTATGTGC	AATGAAGGCATGAGAATAGG TACGCGTTTGAATGGCTTGA GGACCTATTGGAGATCTACT TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., Genomics 9(4):713-720 (1991). general review of somatic cell hybridization see Ledbetter et al. (supra). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOs 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOs 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

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EXAMPLE 6

Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

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Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. FASEB)

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

EXAMPLE 7

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Alternative Technique for Mapping to Chromosomes Mapping of ESTs to chromosomes using fluorescence in situ hybridization

This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO₂/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOS 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., Human Chromosomes: A Manual of Basic Techniques. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

		<i>:</i>	SEQ ID	EST#	Map Location
	•				
		A.	19	EST00023	6p
15	•		22	EST00301	6p
			1894	EST01643	6p21
			1	EST00007	6 q
			224	EST00356	6q
			288	EST00219	6q
20			162	EST00133	Xp11.21 - Xp21.2
		• •	1917	EST01029	Xp11.21 - Xp21.2
			1669	EST00827	Xq26 - Xq27.1
			1899	EST01014	Xq28
		в.	1880	EST01634	1g32
25			485	EST01466	7p13
•	•		506	EST01471	10g11.2
			396	EST01443	17q25

EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, Nucleic Acids Research 12: 387 (1984)).

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The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

Bases from	Mismatches/	Gaps	Percent .	Aligned		
Primer	Ambiquities [†]	<u>Insertions</u> [†]	<u>Deletions</u> ⁺	Accurate	Bases	
101 - 200	1.45	0.18	0.19	98.2	8,800	
201 - 300	1.72	. 0.25	0.11	97.9	8,130	
301 - 400	2.07	0.98	0.37	96.6	5,404	
>400	3.53	2.63	1.06	92.8	3,197	

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. *Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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EXAMPLE 9

Probability of ESTs Containing Coding Sequences

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The ESTs of the present invention were statistically evaluated using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. Proc. Natl. Acad. Sci. USA, 88: 11261-5 (1991)). The CRM program uses a neural network to combine results from several different coding regions by looking at different 6 bp sequences found in coding exons and in introns. program additionally conducts reading frame searches and assesses randomness at the third position of codons. protocol categorizes sequences as having an excellent, good, marginal, or poor probability of containing coding regions. The results are reported in Tables 6-9. There were 219 ESTs categorized as "excellent" (Table 6); 120 categorized as "good" (Table 7); 113 categorized as "marginal" (Table 8); and 1743 categorized as "poor" (Table These results indicate that most ESTs of the present invention comprise noncoding regions.

2373 EST01393 2374 EST01394 2393 EST01417 2394 EST01418 2396 EST01420

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ 10#	CCT#		077	ECT01007	4007	
SEM IVA	E31#		070	E3101707	1807	EST00941
,	E070004/		919	E2101993	1809	EST00943
7	E\$100014		. 980	ES101994	1820	EST00951
. 15	EST00020		986	EST02000	1829	EST00958
48	EST00291		1000	EST02014	1849	EST00975
62	EST00064		1004	EST02018	1860	EST00983
66	EST00067	_	1007	EST02021	1866	EST00989
75	EST00074		1018	EST02032	1871	EST00994
98	EST00260		1021	EST02035	1999	EST01005
106	ESTODO92		1034	ESTO2050	1900	EST01007
108	ESTODOO!	•	1057	EST02030	1070	EST01007
114	EETOOOP		1047	ESTUZUOS	1072	EST01009
115	E0700000		1090	E3102109	1903	EST01018
	E3100099		1090	E2102112	1904	EST01019
124	ES100107		1115	EST02135	1914	EST01026
. 128	EST00252		1118	EST02138	1930	EST01040
156	EST00130		1129	EST02149	1944	EST01050
. 164	EST00135	•	1133	EST02153	1949	EST01054
166	EST00137	•	1141	EST02163	1962	EST01062
174	EST00296		1163	EST02187	1973	EST01071
179	EST00145		1183	EST02208	1977	EST01075
183	EST00148		1243	EST02272 -	1082	EST01080
201	EST00163		1264	EST02203	1001	EST01088
205	EST00165	• .	1265	EST0220/	1007	EST01000
215	EST00172		1265	CCT0220E	1773	EST01090
230	E0100112		1200	E3102273	2000	EST01097
	E3100101		1207	ES102317	2001	EST01098
253	52100133		1308	ES102338	2012	EST01106
263	EST00203		1324	EST02354	2013	EST01107
268	EST00369	٠.	1344	EST02374	2024	EST01117
270	EST00207		1356	EST02386	2043	EST01131
271	EST00283	•	1365	EST02396	· 2051	EST01138
273	EST00208		1383	EST02415	2056	EST01142
276	EST00211		1399	EST02433	2058	EST01144
281	EST00214		1401	EST02435	2050	EST01145
285	EST00286	•	1405	EST02439	2064	EST01149
333	EST00394		1417	EST02452	2000	EST01167
336	EST00307		1/51	ECT02/97	2070	ES101101
339	ESTORAGO		1/57	EST02407	2094	EST01171
362	ECT00/19		1437	E3102473	2110	EST01192
	E3100410		1403	-ES102300	2117	EST01193
389	E5100440		14/3	ES102510	2128	EST01202
441	ES100481	٠.	1479	EST02516	2131	EST01205
454	EST00493		1516	EST02555	2134	EST01208
476	EST00509		1528	EST02569	2144	EST01216
493	EST00522		1531	EST02572	2145	EST01217
504	EST00529		1544	EST02586	2150	EST01222
516	EST00538		1551	EST02593	2155	EST01227
- 518	EST00540		1558	EST02601	2161	EST01231
551	EST01482		1561	EST02604	21.3	EST01238
552	EST00565	•	1581	EST02625	2174	EST01242
559	EST00570		1586	EST02631	2176	EST01244
	EST00592	•	1501	ECT02634	2110	COTO43EE
602	ESTODANA	•	1414	EST02030	2109	EST01255
606	EST00000	•	1010	ESTU2001	2214	EST01272
	ES100009		1024	ES102070	2225	EST01278
608	E0100011		1020	ES1026/6	1807 1809 1820 1829 1849 1866 1871 1888 1890 1892 1903 1904 1914 1930 1944 1949 1962 1973 1977 1982 2010 2011 2012 2013 2024 2043 2051 2056 2058 2059 2064 2090 2091 2116 2117 2128 2131 2134 2144 2145 2155 2161 2155 2162	EST01279
621	ES100620		1637	ES100796	2233	EST01284
635	E2100029		1639	ES100799	2235	EST01286
642	EST00634		1649	EST00808	2236	EST01287
644	EST00636		1651	EST00810	2255	EST01302
687	EST00671		1677	EST00835	2259	EST01304
700	EST00683		1682	EST00839	2263	EST01307
- 743	EST00714		1694	EST00849	SEQ ID#	EST#
753	EST00721		1706	EST00857		20.17
760	EST00726		1708	EST00858	2267	EST01756
764	EST00729		1710	EST00860	2281	EST01321
808	EST00761		1716	EST00865	2283	
823	EST01864		SEQ ID#			EST01322
834				EST#	2300	EST01333
	EST00771		1710	F0700017	2303	EST01335
886	EST01886		1718	EST00867	2303	EST01335
919	EST01921		1731	EST00879	2314	EST01345
930	EST01933	-	1742	EST00887	2334	EST01358
SEQ ID#	EST#		1746	EST00891	2339	EST01362
:			1760	EST00903	2342	EST01365
936	EST01939		1767	EST00907	2348	EST01371
948	EST01957		1769	EST00909	2358	EST01379
965	EST01978		1777		2367	EST01388
				, -	. 2301	

2362 EST01383 2378 EST01397 2399 EST01423 2407 EST02714

Table 7: ESTs with Good Probability of Containing Coding Sequence

SEQ ID#	EST#	1041	EST02057
		1083	EST02102
20	EST00024	1099	EST02118
72	EST00071	1105	EST02124
82	EST00078	1113	EST02133
88	EST00084	1139	EST02161
137	EST00272	1146	EST02168
177	EST00328	1196	EST02221
193	EST00156	1210	EST02238
200	EST00162	1233	EST02262
218	EST00175	1285	EST02314
. 228	EST00179	1331	EST02361
247	EST00279	1388	EST02421
264	EST00204	1418	EST02453
267	EST00297	1439	EST02475
296	EST00228	1502	EST02540
371	EST00426	1537	EST02578
385	EST00436	1563	EST02606
392	EST00442	1599	EST02644
414	EST00460	1602	EST02647
433	EST00474	1693	EST00848
453	EST00492	1695	EST00850
471	EST00505	1729	EST00877
496	EST00525	1730	EST00878
524	EST00544	1738	EST00883
526	EST00546	1739	EST00885
529	EST00549	1743	EST00888
549	EST00563	1768	EST00908
557	EST00569	1780	EST00916
578	EST00588	1804	EST00918
596	EST00602	1805	EST00939
607	EST00610	1811	EST00945
619	EST00619	1819	EST00950
657	EST00646	1826	EST00956
660	EST00649	1830	EST00959
689	EST00673	1845	EST00971
695	EST00679	1848	EST00971
699	EST00682	1853	EST00977
729	EST00703	1967	EST01066
742	EST00713	1992	EST01089
747	EST00717	1994	EST01091
755	EST00723	SEQ ID#	EST#
759	EST00725	SEQ ID#	2014
776	EST00738	1997	EST01094
778	EST00740	2046	EST01034
782	EST01551	2101	EST01177
829	EST00768	2102	EST01177
835	EST00772	2102	EST01178
836	EST00772		202000
862	EST01872	2106 2141	EST01182 EST01213
881	EST01881	2141	EST01213
SEO ID#	EST#	2196	EST01251
2-2 TD#	<u></u>	2203	EST01260 EST01264
884	EST01884	2232	EST01264 EST01283
924	EST01926	2308	EST01283
929	EST01920	2345	EST01359
938	EST01932	2345	EST01368
971	EST01941	2351	EST01373
995	EST02009	2351	EST01373 EST01375
996	EST02009	2354	EST01375 EST01376
1031	EST02046	2359	EST01376 EST01380
TOOT	70107040	£359	70107300

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

SEC	D ID#	EST#		1222	EST02251
				1224	EST02253
	11	EST00018		1228	EST02257
	12	EST00274		1267	EST02296
	24	EST00027		1301	EST02331
	45	EST00364	•	1397	EST02431
	79	EST00076	•	1448	EST02484
	90	EST00302		1480	EST02517
	110	EST00096		1493	EST02531
	44	EST00120		1499	EST02537
	45	EST00121		1503	EST02537
	.92	EST00155		1527	EST02541
	222	EST00177		1536	
	234	EST00184		1548	EST02577 EST02590
	277	EST00212			
	319			1562	EST02605
	368	EST00381		1572	EST02615
	370	EST00425		1575	EST02618
				1595	EST02640
	387	EST00438		1608	EST02653
	402	EST00451		1610	EST02655
	415	EST00461		1621	EST02667
	418	EST00464		1627	EST02674
	426	EST00470		1629	EST02677
	503	EST00528		1631	EST02678
	517	EST00539		1683	EST00840
	522	EST00543		1692	EST00847
	532	EST00551		1751	EST00895
	540	EST00557		1756	EST00900
	570	EST00580		1764	EST02690
	573	EST00583		1770	EST00910
•	576	EST00586		1793	EST00929
	613	EST00615		1847	EST00973
	617	EST00617		1877	EST00998
	626	EST00622		1897	EST01012
	681	EST00665	•	1900	EST01015
	726	EST00700		1939	EST01655
	727	EST00701	•	1940	EST01046
	738	EST00711		1954	EST01058
	745	EST00715	•	SEO ID#	EST#
	.752	EST00720		-	
	791	EST00746		1990	EST01087
	795.	EST00749		2008	EST01103
	803	EST00756		2031	EST01123
	845	EST00777		2041	EST01130
	852	EST00782	•	2044	EST01132
	854	EST00784		2060	EST01146
,	907	EST01907		2100	EST01176
	912	EST01912		2136	EST01210
	935	EST01938		2153	EST01210
SEC		EST#		2204	EST01225
x				2212	EST01265
	968	EST01981		2212	EST01270
	985	EST01999			EST01297
	988	EST02002		2250	
	1043	EST02002		2266	EST01310
	1081	EST02100		2309	EST01340
	1089	EST02100	•	2347	EST01370
	1116	EST02108		2388	EST01406
	1134			2398	EST01422
	1205	EST02154		2405	EST01427
		EST02233			

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	700	E070017/		E0700/E7
SEG ID#	E31#	103	EST00354	204	EST00166	309 315	EST00174 EST00008	404 405	EST00453 EST00454
1	EST00007	105	EST00365	207	EST00167	316	EST00378	406	EST00454
ž	EST00009	107	EST00093	209	EST00331	317	EST00379	407	EST00456
3	EST00010	109	EST00095	210	EST00168	318	EST00380	408	EST00457
4	EST00011	111	EST00281	211	EST00332	320	EST00382	409	EST01444
5	EST00012	112	EST00318	212	EST00169	321	EST00383	410	EST00458
6	EST00013	113	EST00097	213	EST00170	322	EST00384	411	EST00459
8	EST00234	116	EST00100	214	EST00171	323	EST00385	412	EST01445
10 14	EST00016 EST00019	117 118	EST00319 EST00101	216 219	EST00173	325	EST00386	416	EST00462
16	EST00021	119	EST00101	220	EST00176 EST00372	326 327	EST00387 EST00388	417 419	EST00463
17	EST00022	120	EST00103	221	EST00359	328	EST00389	420	EST00465 EST00466
18	EST00373	121	EST00104	224	EST00356	329	EST00390	421	EST00467
19	EST00023	122	EST00105	225	EST00178	330	EST00391	422	EST01447
21	EST00025	123	EST00106	226	EST00333	331	EST00392	423	EST00468
23	EST00026	125	EST00108	229	EST00180	332	EST00393	424	EST01448
25 27	EST00028	126	EST00109	231	EST00334	334	EST00395	425	EST00469
28	EST00029 EST00030	127 129	EST00320 EST00321	232 233	EST00182	335	EST00396	427	EST01449
29	EST00031	130	EST00355	235	EST00183 EST00185	337 340	EST00398 EST00402	428 429	EST01451
30	EST00032	131	EST00322	236	EST00186	341	EST00402	431	EST00471 EST00473
31	EST00033	133	EST00111	237	EST00187	342	EST00404	432	EST01452
32	EST00233	134	EST00375	238	EST00188	344	EST00405	434	EST00475
33	EST00034	135	EST00112	239	EST00189	345	EST00406	435	EST00476
34	EST00035	136	EST00113	240	EST00335	347	EST01829	436	EST00477
35 36	ESTOOO36	138	EST00114	241	EST00191	348	EST01830	437	EST00478
. 39	EST00037 EST00039	139 140	EST00116	242	EST00192	349	EST01831	438	EST00479
. 40	EST00039	141	EST00117 EST00118	243 244	EST00193 EST00194	350 351	EST00407 EST00408	439 440	EST00480
41	EST00041	142	EST00323	245	EST00347	352	EST00408	442	EST01454 EST01456
42	EST00042	143	EST00119	246	EST00196	353	EST00410	443	EST00482
46	EST00044	146	EST00122	250	EST00197	354	EST01433	444	EST00483
· 47	EST00046	147	EST00292	252	EST00198	355	EST00411	446	EST00485
49	EST00047	148	EST00236	254	EST00200	356	EST00412	447	EST00486
50	EST00048	149	EST00123	255	EST00201	357	EST00413	448	EST00487
. 51	EST00049	150	EST00124	256	EST00345	358	EST00414	449	EST00488
52 53	EST00052 EST00054	151 152	E\$T00125 E\$T00126	257 259	EST00337 EST00202	359 360	EST00415	450	EST00489
54	EST00055	153	EST00125	260	EST00202	361	EST00416 EST00417	451 452	EST00490 EST00491
55	EST00056	154	EST00128	261	EST00338	363	EST00417	455	EST00491
56	EST00057	155	EST00129	262	EST00339	364	EST00420	457	EST00495
57	EST00058	157	EST00131	265	EST00205	365	EST01434	458	EST00496
58	EST00059	158	EST00132	266	EST00206	366	EST00421	459	EST00497
59	EST00061	159	EST00325	272	EST00340	367	EST00422	460	EST01457
60 63	EST00062	160	EST00326	274	EST00268	369	EST00424	461	EST01836
64	EST00065 EST00066	162 163	EST00133 EST00134	275 278	EST00209 EST00342	372 373	EST00427	462	EST00498
67	EST00351	165	EST00134	279	EST00342	373 374	EST01832 EST00428	464 465	EST00499 EST00500
- 68	EST00068	167	EST00138	280	EST00343	375	EST00429	466	EST00501
69	EST00360	168	EST00140	283	EST00215	376	EST01436	467	EST00502
<u>71</u>	EST00070	169	EST00141	284	EST00216	377	EST00430	468	EST00503
73	EST00072	170	EST00295	286	EST00217	378	EST00431	470	EST00504
74 76	ESTOOO73	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
80	EST00075 EST00077	172 173	EST00142 EST00143	288 289	EST00219 EST00220	380 381	EST01439 EST00433	473	EST00506
81	EST00315	175	EST00144	290	EST00221	382	EST00433	474	EST00507
83	EST00079		EST00294	204	EST00222	SEQ ID#	EST#	477	EST01463
84	EST00080	182	EST00329		EST00223			478	EST00510
85	EST00081	184	EST00149	293	EST00224	383	EST00435	479	EST00511
86	EST00082	185	EST00150	294	EST00225	384	EST01440	480	EST01464
87	EST00083	186	EST00151	SEQ ID#	EST#	386	EST00437	481	EST00512
89 91	EST00085 EST00086	190 191	EST00153 EST00154	205	ECTOD224	388	EST00439	482	EST01465
92	EST00087	194	EST00154	295 297	EST00226 EST00230	390 391	EST01442 EST00441	483 484	EST00513
94	EST00353	SEQ ID#	EST#	298	EST00230	393	EST00441	484 487	EST00514 EST00516
95	EST00088			302	EST00303	395	EST00445	488	EST00517
96	EST00089	195	EST00158	303	EST00348	397	EST00446	489	EST00518
99	EST00316	196	EST00159	304	EST00307		EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	EST00308	399	EST00448	491	EST00520
100	EST00090	198	EST00161 EST00277	306	EST00309		EST00449	492	EST00521
101	EST00090	199 203	EST00277	307 308	EST00312	401 403	EST00450	495 497	ESTO0524
101	20100071	203	E3100104	308	EST00314	403	EST00452	497	EST00526

	498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
	499									
		EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
	500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
	501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
	502	EST01469	605	EST00608	703		805	EST00758		
						EST00685			898	EST01898
	507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
	508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
	509	EST01472	611	EST00613	706	EST00688	809			
								EST00762	901	EST01901
	510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
	511	EST00533	615	EST00616	. 709	EST00690	811	EST00764	903	EST01903
	512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	
										EST01904
	513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
	514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
	515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
	519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
	520	E\$T00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
	521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
	523	EST01838	627	EST00623	717	EST01525	820	EST01860		
									914	EST01914
		EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
	527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
	528	EST00548	630	EST01505		EST00697	826	EST01867	917	EST01919
	530	EST01477	631	EST00625						
					721	EST01527	827	EST01558	918	EST01920
	531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
	533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
	534	EST01478	634	EST00628	725	EST00699	831	EST00769		EST01924
									922	
	535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
	536	EST01479	637	EST00630	730·	EST00704	837	EST01561	925	EST01927
	537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
	538	EST.00555	. 640	EST01509	732	EST00706	839	EST01562	927	EST01930
	539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
	541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
	542	EST01480	645 -		735	EST00709				
							842	EST01563	932	EST01935
	543	EST00559	646	EST00638	<i>7</i> 36	EST01532	843	EST01564	933	EST01936
	544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
	545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
	547	EST00561	649							
				EST00641	740	EST01535	847	EST00779	939	EST01943
	548	EST00562	- 651	EST00643	741	EST00712	848	EST01566	SEQ_ID#	EST#
	550	EST00564	652	EST01510	744	EST01537	849	EST01567		
	553	EST00566	654	EST00644	746	EST00716	850	EST00780	940	EST01944
		F3100300	U)-	E3100044						
	E E E	FATA4/67	/FF							
	555	EST01483	655	EST00645	748	EST01850	851	EST00781	941	EST01945
	555 556	EST01483 EST00568	655 656	EST00645 EST01513	748	EST01850	851	EST00781	941	EST01945
	556	EST00568	656	EST01513	748 749	EST01850 EST00719			941 942	EST01945 EST01947
	556 558	EST00568 EST01484	656 658	EST01513 EST00647	748 749 750	EST01850 EST00719 EST01539	851 SEQ ID#	EST00781	941 942 943	EST01945 EST01947 EST01948
	556 558 560	EST00568 EST01484 EST01485	656 658 659	EST01513 EST00647 EST00648	748 749 750 751	EST01850 EST00719 EST01539 EST01540	851 SEQ 1D# 853	EST00781 EST# EST00783	941 942 943 944	EST01945 EST01947 EST01948 EST01949
	556 558 560 561	EST00568 EST01484 EST01485 EST00571	656 658 659 661	EST01513 EST00647	748 749 750	EST01850 EST00719 EST01539	851 SEQ ID#	EST00781	941 942 943	EST01945 EST01947 EST01948
	556 558 560	EST00568 EST01484 EST01485	656 658 659	EST01513 EST00647 EST00648 EST00650	748 749 750 751 754	EST01850 EST00719 EST01539 EST01540 EST00722	851 SEQ 1D# 853 855	EST00781 EST# EST00783 EST00785	941 942 943 944 945	EST01947 EST01948 EST01949 EST01950
	556 558 560 561 562	EST00568 EST01484 EST01485 EST00571 EST00572	656 658 659 661 662	EST01513 EST00647 EST00648 EST00650 EST00651	748 749 750 751	EST01850 EST00719 EST01539 EST01540	851 SEQ ID# 853 855 856	EST00781 EST# EST00783 EST00785 EST01568	941 942 943 944 945 946	EST01945 EST01947 EST01948 EST01949 EST01950 EST01953
	556 558 560 561 562 563	EST00568 EST01484 EST01485 EST00571 EST00572 EST00573	656 658 659 661 662 663	EST01513 EST00647 EST00648 EST00650 EST00651 EST00652	748 749 750 751 754 SEQ ID#	EST01850 EST00719 EST01539 EST01540 EST00722 EST#	851 SEQ ID# 853 855 856 857	EST00781 EST# EST00783 EST00785 EST01568 EST01868	941 942 943 944 945 946 947	EST01945 EST01947 EST01948 EST01949 EST01950 EST01953 EST01954
	556 558 560 561 562 563 564	EST00568 EST01484 EST01485 EST00571 EST00572 EST00573 EST00574	656 658 659 661 662 663 664	EST01513 EST00647 EST00648 EST00650 EST00651 EST00652 EST00653	748 749 750 751 754 <u>SEQ ID#</u>	EST01850 EST00719 EST01539 EST01540 EST00722 EST#	851 SEQ ID# 853 855 856 857 858	EST00781 EST# EST00783 EST00785 EST01568 EST01868 EST01869	941 942 943 944 945 946 947 949	EST01945 EST01947 EST01948 EST01950 EST01953 EST01954 EST01958
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	1420	EST02456	1520			EST02668	1728	EST00876	1832	EST00960
	1421	EST02457		EST02561	1623	EST02669	1732	EST01590	1833	EST00961
			1521	EST02562	1625	EST02672	1733	EST01591	1835	EST00962
	1422	EST02458	1522	EST02563	1626	EST02673	1734	EST00880	1836	- EST01622
	1423	EST02459	1523	EST02564	1628	EST02675	1735	EST00881	1837	EST00963
	1424	EST02460	1524	EST02565	1632	EST02679	1736	EST01592	1838	EST00964
•		EST02461	1525	EST02566	1633	EST02680	1737	EST00882	1839	EST00965 .
	1426	EST02462	1526	EST02567	1634	EST02681	1740	EST02687	1840	EST00966
	1428	EST02464	1529	EST02570	1635	EST02682	1741	EST00886	1841	EST00967
	1429	EST02465	1530	EST02571	1636	EST02684	1744	EST00889	1842	EST00968
	1431	EST02467	1532	EST02573	1638	EST00798	1745	EST00890	1843	
	1432	EST02468	1533	EST02574	1640	EST00800				EST00969
	1433	EST02469	1534	EST02575	1641	EST00801	1747	EST00892	1844	EST00970
	1434	EST02470	1535	EST02576	1642		1748	EST00893	1846	EST00972
	1435	EST02471	1538	EST02579		EST00802	1749	EST01593	1850	EST01624
	1436	EST02471	1539		1643	EST00803	1750	EST00894	1851	EST00976
				EST02580	1645	EST00804	1752	EST00896	1854	EST00978
	1437	EST02473	1540	EST02581	1646	EST00805	1753	EST00897	. 1855	EST00979
	1438	EST02474	1541	EST02582	1647	EST00806	1754	EST00898	1857	EST00980
	1440	EST02476	1542	EST02583	1648	EST00807	1755	EST00899	1858	EST00981
	1442	EST02478	1545	EST02587	1650	EST00809	1757	EST01594	1859	EST00982
	1443	EST02479	1546	EST02588	1652	EST00811	1758	EST00901	1861	EST00984
	1444	EST02480	1547	EST02589	1653	EST00812	1759	EST00902	1862	EST00985
	1445	EST02481	1549	EST02591	1655	EST00813	1761.		1863	EST00986
	1446	EST02482	1550	EST02592	1656	ESTOOB14	1762	EST00904	1864	EST00987
	1447	EST02483	1552	EST02594	1657	EST00B15	1763	EST00905		
	1450	EST02486	1553	EST02595	1658	EST00816			1865	EST00988
	1452	EST02488	1554	EST02597	1659		1765	EST01600	1867	EST00990
	1453	EST02489				EST00817	1766	EST00906	1868	
			1555	. EST02598	1660	EST00818	1772	EST02691	1870	EST00993
	1454	EST02490	1556	EST02599	1661	EST00819	1773	EST00911	1872	EST00995
	1455	EST02491	1557	EST02600		EST00820	1774	EST00912	1873	EST01630
	1456	EST02492	1559	EST02602	1663	EST00821	1775	EST02692	1874	EST00996
	1458	EST02495	1560	EST02603	1664	EST00822	1776	EST01603	1875	EST01631
	1459	EST02496	1564	EST02607	1665	EST00823	1778	EST00914	1876	EST00997
	1460	EST02497	1565	EST02608	1666	EST00824	1779	EST00915	SEQ ID#	EST#
	1461,	EST02498	1568	EST02611	1668	EST00826	1781	EST00917		
	1462	EST02499		EST02612	1669	EST00827	1782	EST00918	1878	EST00999
	1464	EST02501	1570	EST02613	1670	EST00828	1783	EST00919		
	1466	EST02503	1571	EST02614	1671	EST00829			1879	EST01633
•	1467	EST02504	1573				SEQ ID#	EST#	1881	EST01000
	1469	EST02506	1574	EST02616	1672	EST00830	4704		1882	EST01638
	1470	EST02507		EST02617	1673	ESTOOB31	1784	EST00920	1883	EST01001
			1576	EST02619	1674	EST00832	1785	EST00921	1884	EST01002
	1471	EST02508	1577	EST02620	SEQ_ID#	EST#	1786	EST00922	1886	EST01003
	1472	EST02509	1578	EST02621			. 1787	EST00923	1887	EST01004
	1474	EST02511	1579		1675	EST00833	1788	EST00924	1889	EST01006
		EST02512	1580	EST02623	1676	EST00834	1789	EST00925	1891	EST01008
	1476	EST02513	SEQ ID#	EST#	1678	EST00836	1790	EST00926	1893	EST01642
	· 1477	EST02514			1679	EST00837	1791	EST00927	1895	EST01010
	1481	EST02518	1582	EST02626	1680	EST00838	1792	EST00928	1898	
	1482	EST02519	1583	EST02628	1684	EST00841	1794			EST01013
•	SEQ ID#	EST#	1584	EST02629	1685	EST00842		EST01607	1899	EST01014
٠			1585	EST02630		EST01574	1795	EST00930	1901	EST01016
	1483	EST02520		EST02632			1796	EST00931		EST01017
	1484	EST02521			1687	EST00843	1797	EST00932	1905	EST01020
	1404		1590	EST02635	1688	EST00844	1798	EST00933	1906	EST01021
							• • •			

1907 EST016	777 7014 50704440	2440		
1908 EST010		2118 EST01194	2223 EST01742	2332 EST01794
1909 ESTO10		2119 EST01195	2224 EST01277	2333 EST01357
1911 ESTO2		2122 EST01197	2228 EST01280	2335 EST01359
		2123 EST01713	2229 EST01281	2336 EST01360
1912 EST010		2124 EST01198	2231 EST01746	2337 EST01361
		2125 EST01199	2237 EST01288	2340 EST01802
1915 EST010		2126 EST01200	2238 EST01289	2341 EST01364
1916 EST010		2127 EST01201	2239 EST01290	2343 EST01366
1917 EST010		2129 EST01203	2240 EST01291	2344 EST01367
1918 EST026	95 2027 EST01120	2130 EST01204	2241 EST01747	2349 EST01372
1919 EST010	30 2028 EST01121	2132 EST01206	2242 EST01292	2350 EST02708
1920 EST010		2133 EST01207	2243 EST01293	
1921 EST016		2135 EST01209	2244 EST01294	
1922 EST010		2137 EST01211		2356 EST01377
1923 EST010	33 2034 EST01124	2139 EST01716		2357 EST01378
1924 EST010			2247 EST01296	2360 EST01381
1925 EST010			2249 EST01298	2361 EST01382
1926 EST010		2142 EST01214	2251 EST01300	2363 EST01384
1927 EST010		2143 EST01215	2252 EST01750	2364 EST01385
1929 EST010		2147 EST01219	2253 EST01301	2365 EST01386
		2148 EST01220	2256 EST02718	2366 EST01387
		2151 EST01223	2257 EST01303	2369 EST01811
1934 EST010		2152 EST01224	2258 EST01754	2370 EST01390
1935 EST010		2154 EST01226	2260 EST01305	2371 EST01391
1936 EST010		2156 EST01718	2261 EST01755	2372 EST01392
1937 EST016		2157 EST01719	2262 EST01306	2375 EST01815
1938 EST016		2158 EST01228	2264 EST01308	2376 EST01395
1941 EST010		2159 EST01229	2265 EST01309	2377 EST01396
1942 EST010		2160 EST01230	2268 EST01311	2379 EST01398
1943 EST010		2162 EST01232	2269 EST01312	2380 EST01399
1945 EST010		2163 EST01233	2270 EST01313	2381 EST01400
1946 EST026		2164 EST01234		
1947 EST010		2165 EST01720		2382 EST01401
1948 EST010	3 2061 EST01147			2383 EST01402
1950 EST010			2273 EST01315	2384 EST01403
1951 EST010			2275 EST01316	2385 EST01816
1952 EST010		2169 EST01722	2276 EST01317	2386 EST01404
1955 EST016		2170 EST01239	2277 EST01318	2387 EST01405
· 1957 ESTO10		2171 EST01240	2278 EST01319	•• • • •
	=::::::	2172 EST01241	2279 EST01320	
	= = = = = = = = = = = = = = = = = =	2175 EST01243	2280 EST01763	
1959 EST010		2177 EST01245	2284 EST01323	
1963 EST010		2178 EST01726	SEQ_ID# EST#	
1964 EST010		2179 EST01246		
1966 EST0106		2180 EST01247	2285 EST01768	
1968 EST0106		2181 EST01248	2287 EST01770	
1969 EST010		SEQ ID# EST#	2288 EST01324	
1970 EST0166			2290 EST01772	
1971 EST0108		2182 EST01249	2291 EST01773	•
1972 EST0107	'0 2080 EST01157	2183 EST01250	2292 EST01326	
. 1975 EST0107	3 SEQ ID# EST#	2185 EST01252	2293 EST01327	
1976 EST0107	<u> </u>	2186 EST01253	2294 EST01328	
· 1978 EST0107	6 2081 EST01158	2187 EST01727	2295 EST01329	
1979 EST0107			2296 EST01330	
SEQ ID# EST#	_ 2083 EST01160	2190 EST01728	2298 EST01331	
	2084 EST01161	2191 EST01256	2299 EST01332	
1980 EST0107	8 2085 EST01162	2193 EST01258	2301 EST01334	
1981 EST0107		2194 EST01729	2304 EST01780	
1983 EST0108		2195 EST01259		
1984 EST0108	2 2088 EST01166	2197 EST01261	2305 EST01336	
1985 EST0108	3 2091 EST01168		2306 EST01337	
1986 EST0108		2198 EST01730 2199 EST01262	2310 EST01341	
1988 EST0108			2311 EST01342	
1989 EST0108		2200 EST01731	2312 EST01343	
1995 EST0109		2201 EST01263	2313 EST01344	
		2202 EST01732	2315 EST01346	
		2205 EST01735	2316 EST01782	
1998 EST0109		2206 EST01736	2317 EST01347	
1999 EST0109		2208 EST01267	2318 EST01348	
2002 EST0109		2209 EST02717	2319 EST01349	
2003 EST0167		2210 EST01268	2321 EST01350	
2005 EST0110		2211 EST01269	2322 EST01351	
2006 EST0110		2213 EST01271	2323 EST01789	
· 2007 EST0110		2215 EST01273	2325 EST01353	
2009 EST0167		2218 EST01274	2327 EST01354	
2010 EST0110	4 2112 EST01188	2219 EST01275	2328 EST01355	
2011 EST0110	5 2113 EST01189	2220 EST01740	2329 EST01792	
2014 EST0110	B 2114 EST01190	2221 EST01741	2330 EST01793	
2015 EST0110		2222 EST01276	2331 EST01356	

SEQ ID#	EST#		
2389 2391	EST01407		
2392	EST01415 EST01416		
2395 2397	EST01419 EST01421		
2401 2403	EST01424 EST01425		
2404	EST01426 EST02713		
2409	EST00273		

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EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
1024	ECTO1620	:	TWD damings busin
1834 97	EST01620 EST00289	M M	AMP deaminase, brain Aconitase
	EST00203	M .	Alcohol dehydrogenase
	EST01700	M	Anion exchanger homolog AE3
	EST01443	М	CDPdiacylglycerol-serine O-phosphatidyltransfera
	EST01663	M	Ca2+-transporting ATPase 2
	EST02055	M	Calcium channel
	EST01257		Diacylglycerol kinase, lymphyocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	М	Fo ATPase beta subunit, mitochondrial
	EST00825	M	Gamma-aminobutyric acid transporter
	EST02446	M	Glutamate-aspartate carrier protein
	EST02034	М	Glutaminase
	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
	EST01724		Lon protease
	EST02463	M	Long-chain-fatty-acid-CoA ligase
	EST01744 EST02609	M	NAD(P) + transhydrogenase (B-specific)
	EST01573	M M	Neutrophil oxidase factor Nucleoside diphosphate kinase
	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodie
	EST00287	M	Processing enhancing protein
*	EST01775	M	Prohormone cleavage enzyme
	EST00376	M	Prolyl endopeptidase
	EST01572	M	Protochlorophyllide reductase
	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein Lla
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
	EST00301	M	Ribosomal protein S10
	EST01826	M	Ribosomal protein S10
	EST01459	M	Ribosomal protein YL10
	EST01697	M	Succinate dehydrogenase flavoprotein
	EST01715	M	Succinate dehydrogenase flavoprotein
1771 2121	EST01601	M M	Thiosulfate sulfurtransferase (rhodanese)
1726	EST01711 EST01588	M	Valine-tRNA ligase XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
	EST01982	R	ADP-ribosylation factor 1
	EST02146	R	Calbindin D28
	EST01645	R	Calmodulin
	EST01466	R	Calmodulin-dependent protein kinase, type II, be
2302	EST01779	R ·	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R .	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID		Group	Putative Identification
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinas
	EST00734	R .	MARCKS homolog
4	EST02418	R	MARCKS homolog
	EST00259 EST01961	R R	Notch/Xotch
1395	EST02429	R R	Notch/Xotch Nuclear factor 1-like protein (NF1)
	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit
			The second secon

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202 EST00298 R
                         Protein-tyrosine phosphatase LRP
       EST02515 R
  1478
                         Rab5
  1408
       EST02442
                 R
                         Seven in absentia
  300 EST00232
                 R
                         Transforming protein (dbl)
  1147
       EST02169
                         Tyrosine kinase
       EST02378
                  R
                         cAMP-dependent protein kinase inhibitor
  1348
  1931 EST01041
                 R
                         cAMP-regulated phosphoprotein
                         cAMP-specific phosphodiesterase
  1413 EST02447
   37 EST00038 R
                         ras p21-like small GTP-binding protein (smg GDS)
  102
       EST00248
                 R
                         rho H12/ ARH12
  299
       EST00249
                  R
                         smg p25A GDP dissociation inhibitor
  189 EST00282
                         trkB
                 R
  1332 EST02362
                         GA binding protein, beta subunit
  1277
       EST02306
                 R
                         Bib protein
    43 EST00371
                         Maternal G10 protein
                 R
  1704 EST01580
                         Myeloid differentiation primary response gene My
  346
187
       EST01828
                 R
                         Otd homeotic protein
       EST00152
                  R
                         Wilm's tumor-related protein
                         Zinc Finger Proteins
  249 EST00275
                 R
  413 EST01446
                         Zinc Finger Proteins
  469
       EST01460 R
                         Zinc Finger Proteins
  833
       EST01560
                 R
                         Zinc Finger Proteins
                         Zinc finger proteins
  1230 EST02259
                         Zinc finger proteins
  1496 EST02534
                 R
       EST01352
                 R
                         Zinc Finger Proteins
  2324
                         60K filarial antigen
       EST00250
  208
                 S
  2320 EST01784
                         60K filarial antigen
                         Actin, other Actin, other
  251
       EST00370
                 S
  2146
       EST01218
                 S
                         Actinin, alpha
  248 EST00271
  891 EST01891
                  S
                         Actinin, alpha
 1500
       EST02538
                  S
                         Actinin, alpha
                         Agrin
  132
       EST00110
                  S
  1852
       EST01625
                         Agrin
  1965
       EST01664
                         Amyloid A4
                  S
  2068
       EST01694
                  S
                         Amyloid A4
  2408 EST00244
                         Amyloid A4
  1880 EST01634
                  Ş
                         Axonal glycoprotein TAG-1
  2004
       EST01676
                  S
                         Cofilin
                         Dilute (myosin heavy chain)
  650
       EST00642
                         Gelation factor ABP-280
  2217
       EST01738
                         Histocompatibility antigen modifier 1
  1885
       EST01639
                  S
   77
       EST00257
                  S
                         Kinesin
SEQ ID
       EST#
                  Group
                        Putative Identification
 _ _ _ _ _
        ------
    78 - EST00258
                  S
                         Kinesin
  2245 EST01748
                  S
                         Kinesin
  313 EST00276
                         Lysosomal membrane glycoprotein 1 (LAMP-1)
       EST00368 S
                         Microtubule-associated protein 1B
   223
                         Microtubule-associated protein 1B Microtubule-associated protein 1B
   824
       EST01865
                  S
  2032 EST01683
 2017 EST01678
                 S
                         Milk fat globule membrane protein
  1567
       EST02610
                  S
                         Neural cell adhesion molecule L1
   506 EST01471
                  S
                         Neuraxin
                         Radial spoke protein 3
  2368 EST01389
   951 EST01960
                         Spectrin, beta
                 S
                         Sperm membrane protein
  2089
       EST01699
   653 EST01512
                         Tubulin, alpha
                  S
   311 EST00270
                         Tubulin, beta
                         Tubulin, beta
Tubulin, beta
   594
       EST01490
                  S
   757
       EST01542
                  S
  1245 EST02274
                  S
                         Tubulin, beta
                         Tubulin, beta
                 S
  1589 EST02634
  1468 EST02505 S
                         Matrin 3
```

-70-

1371 EST02402 S Talin 1701 EST00853 S Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS ·	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
. 227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
· 346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
. 310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
. 993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
. 1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
30 0	EST00232	OG	Transforming protein (dbl)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	ОМ	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphyocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
. 1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

SEO ID	EST#	Group	Putative Identification
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiest
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM .	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PΙ	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST02368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC -	Tubulin, beta
5 94	EST01490	SC	Tubulin, beta
757	EST01542	SC	· ·
1245	EST01342 EST02274	SC	Tubulin, beta
1589	EST02274 EST02634	SC	Tubulin, beta
1701	EST02054 EST00853	SC	Tubulin, beta Unc-104
969	EST01982	ST	
1126	EST01982 EST02146		ADP-ribosylation factor 1
1910	EST01645	ST ST	Calbindin D28
161	EST01043 EST00247	ST	Calmodulin
769			MARCKS (myristoylated alanine-rich protein kinase
1386	EST00734	ST	MARCKS homolog
1931	EST02418	ST	MARCKS homolog
1413	EST01041	ST	cAMP-regulated phosphoprotein
299	EST02447	ST	cAMP-specific phosphodiesterase
277	EST00249	ST	smg p25A GDP dissociation inhibitor

SEQ ID	EST#	<u>Group</u>	Putative Identification
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca2+-transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
- 1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX.	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

EXAMPLE 11

<u>cDNA Libraries Generated From Specific Genomic DNA</u> <u>by Exon Expression & Amplification</u>

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Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A) + cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were endwith T4 DNA polymerase, digested with appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

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EXAMPLE 12

PCR Amplification from Predicted Exons

Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

EXAMPLE 13

Complete Sequence of EST Clone Inserts

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There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. supra). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

EXAMPLE 14

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<u>Determining Reading Frame, Orientation, Coding Regions:</u> ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

EXAMPLE 15

35 Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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present invention, to prepare PCR primers for a variety of The PCR primers are preferably at least 15 applications. bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. PCR primers and amplified DNA of this Example find use in the Examples that follow.

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EXAMPLE 16

Forensic Matching by DNA Sequencing

In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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of 100 bases in length are used to prove identity between the suspect and the sample.

EXAMPLE 17

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Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprinttype identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

EXAMPLE 18

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Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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blotting see Davis et al. (<u>Basic Methods in Molecular</u> <u>Biology</u>, 1986, Elsevier Press. pp 62-65).

A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using endlabeled oligonucleotides derived from the ESTs. translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide statistically higher level of confidence identification since there will be an increased number of sets of bands used for identification.

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EXAMPLE 19

Dot Blot Identification Procedure

Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The p^{32} oligonucleotides are end labelled with using polynucleotide kinase (Pharmacia). Dot Blots are created by spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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NOs provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The 32P labeled DNA fragments are successively sequentially hybridized with stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by A unique pattern of dots distinguishes one individual from another individuals.

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EXAMPLE 20

Alternative "Fingerprint" Identification Technique

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EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

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Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with P³². The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

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It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

EXAMPLE 21

Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

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EXAMPLE 22

Identification of a gene associated with Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferrably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

from normal patients is essential for providing gene or other therapies for AD patients.

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Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA, receptor

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protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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Preparation and Use of Antisense Oligonucleotides

Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is complementary to the corresponding mRNA. For a review of antisense design see Green et al., Ann. Rev. Biochem. 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., Pharmacol. Ther. 50(2):245-254, (1991).

Antisense molecules are introduced into cells that express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between $1 \times 10^{-10} \text{M}$ to $1 \times 10^{-4} \text{M}$. Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of 1×10^{-7} translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate It is additionally contemplated that cells by injection. from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

EXAMPLE 24

Preparation and use of Triple Helix Probes

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Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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expression in individuals having diseases associated with a Similarly, a portion of the EST or particular gene. corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine: homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOs such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides be prepared may on an oligonucleotide synthesizer or they may be purchased specializing commercially from a company oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that to include but limited are not calcium phosphate precipitation, DEAE-Dextran, electroporation, liposomemediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated WO 93/16178

with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

EXAMPLE 25

Gene expression from DNA Sequences Corresponding to ESTs

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A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5'primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

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The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferrably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example, β -globin. Antibody to β -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the β -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating β -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit β -globin. Intron II of the rabbit β -globin gene facilitates splicing of the expressed transcript,

polyadenylation incorporated into the signal construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from construct using in vitro translation systems such as In vitro ExpressTM Translation Kit (Stratagene).

Example 26

Production of an Antibody to a Human Protein

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Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., Nature 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

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microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., Meth. Enzymol. 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. Basic Methods in Molecular Biology Elsevier, New York. Section 21-2.

B. Polyclonal Antibody Production by Immunization

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antiserum containing Polyclonal antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low Small doses (ng level) of antigen titer antisera. administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. J. Clin. Endocrinol. Metab. 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: Handbook of Experimental Immunology D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12 μ M). Affinity of the antisera for the antigen is

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: Manual of Clinical Immunology, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a biological sample.

EXAMPLE 27

Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

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Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker. Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

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Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies labeled with the marker. Either monoclonal or heterologous antisera is suitable for either procedure.

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A. Immunohistochemical Techniques

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Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: Basic & Clinical Immunology, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: Methods in Immunodiagnosis, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example ¹²⁵I, and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4 μ m, unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that signal using appropriate standards.

B. Identification of Tissue Specific Soluble Proteins

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The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by Davis, L. et al., Section 19-2 in: Basic Methods in Molecular Biology (P. Leder, ed), Elsevier, New York (1986), using a

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range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50 μ l, and containing from about 1 to 100 μ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis; is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

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In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

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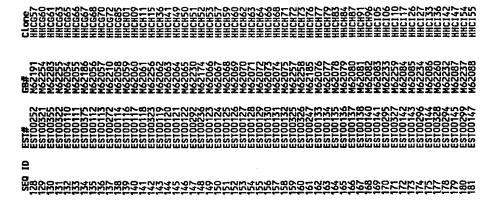
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VII. Correlation of EST and Clone Identifiers

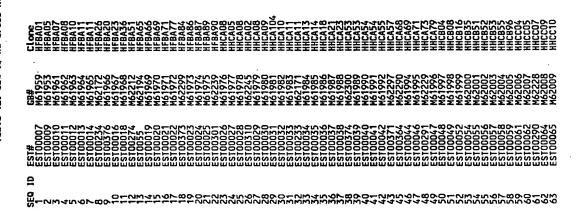
The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

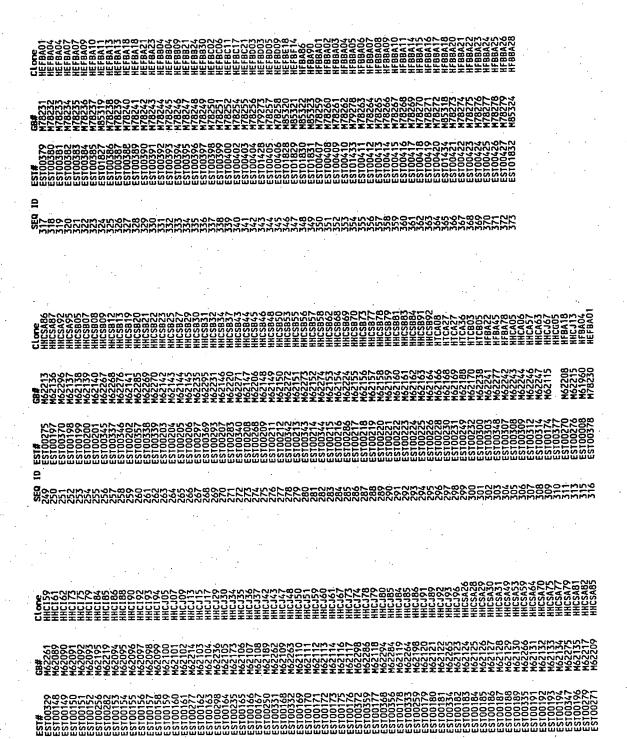
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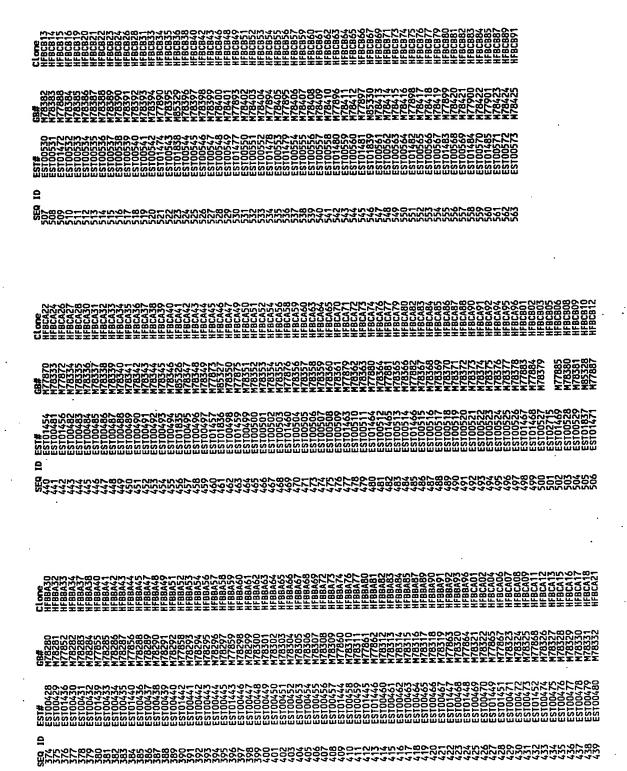
Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

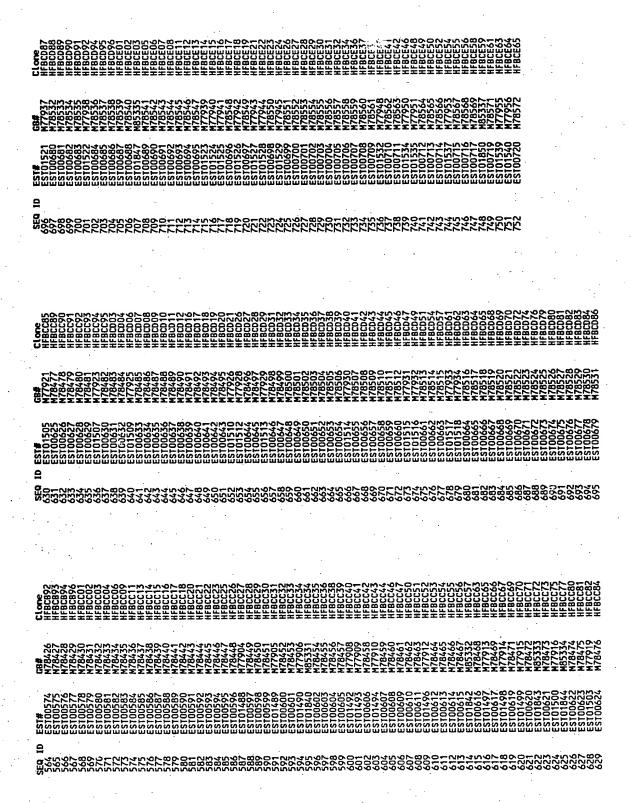


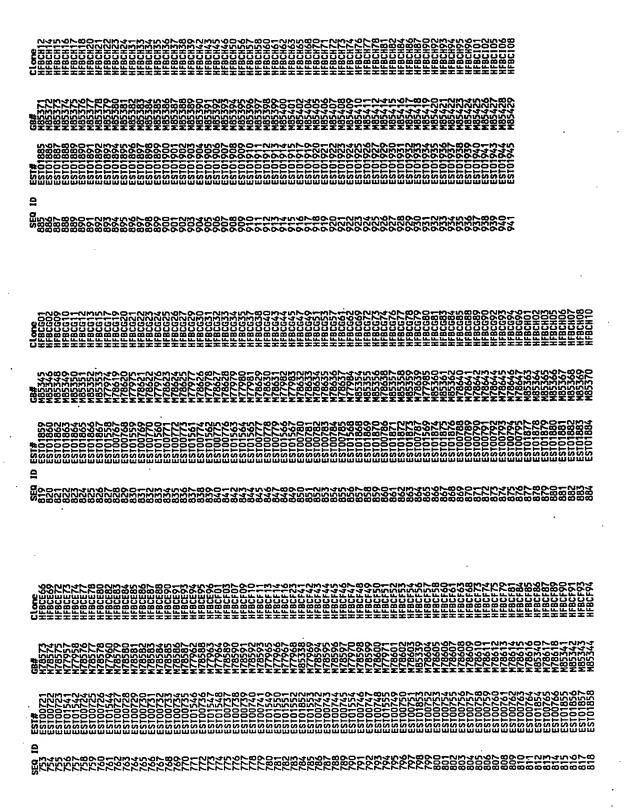


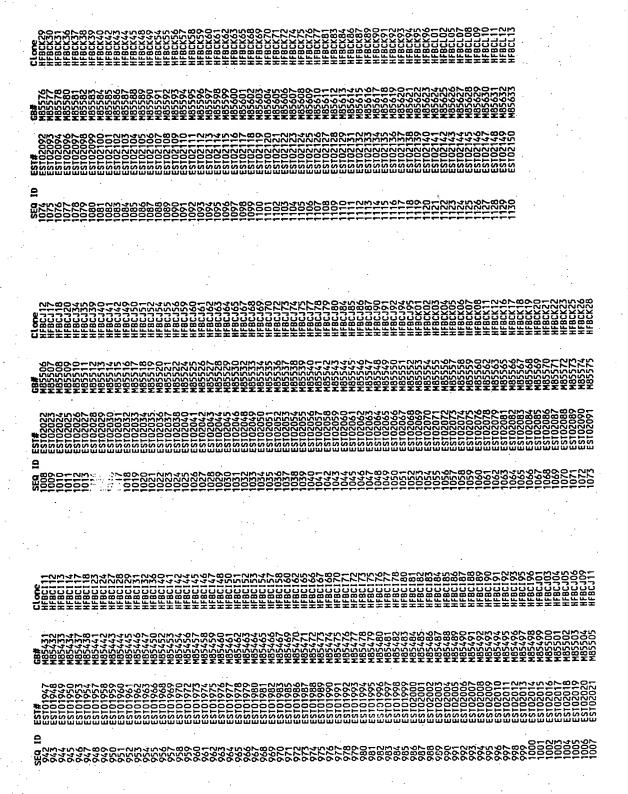


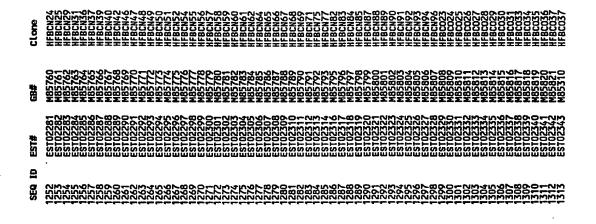


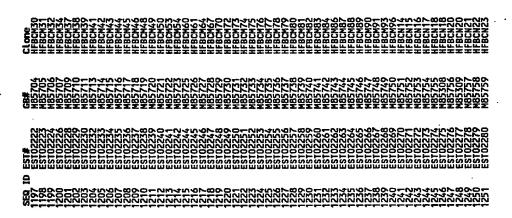


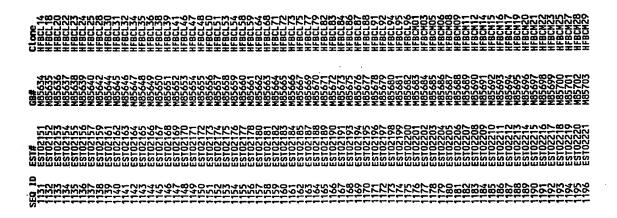


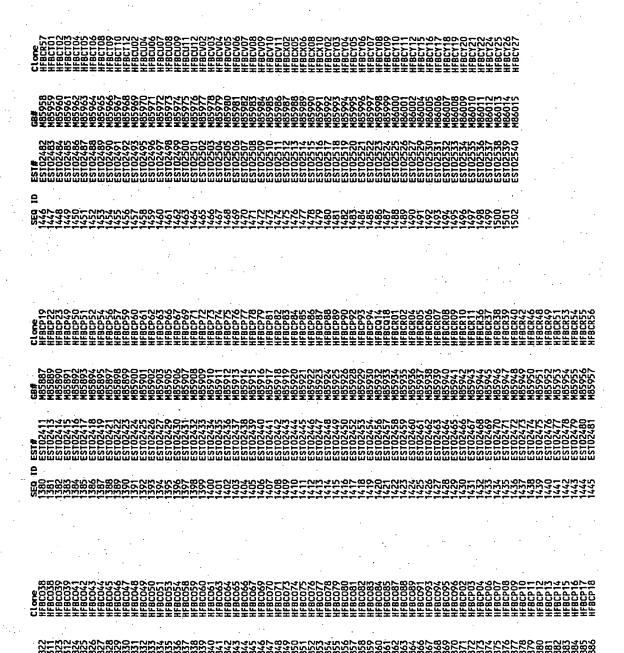


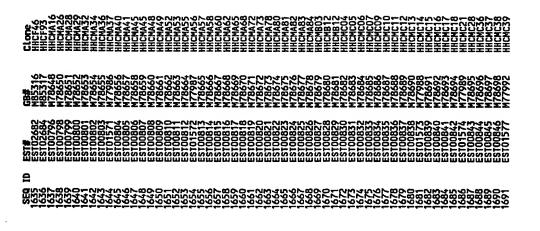


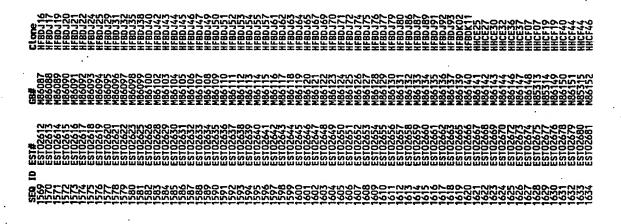




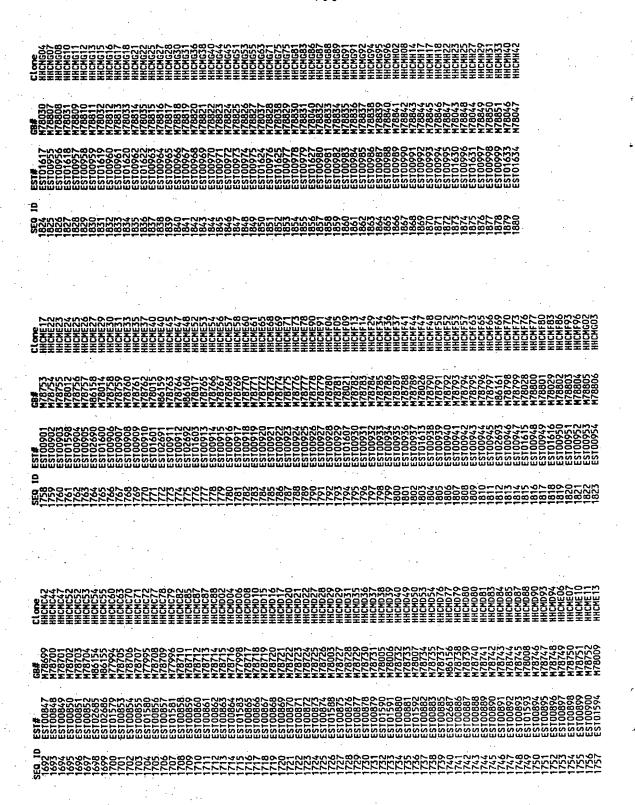


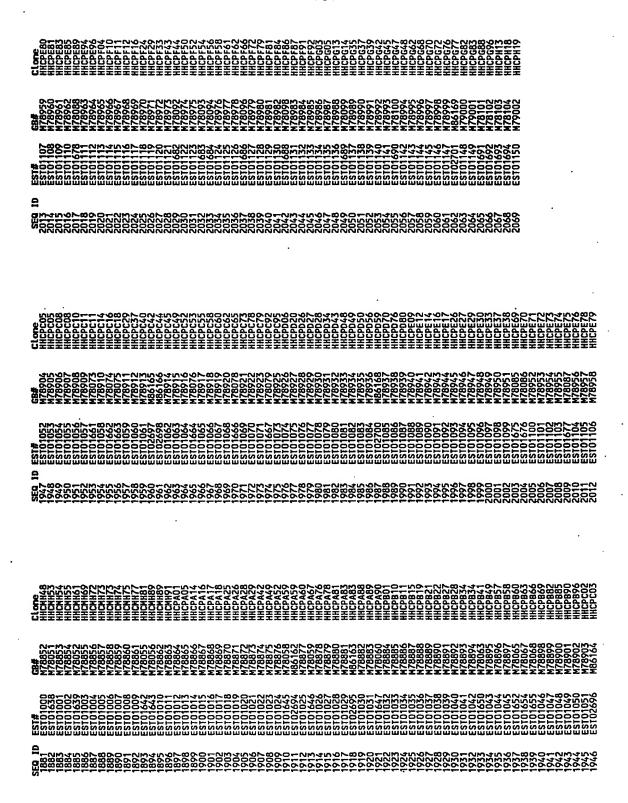


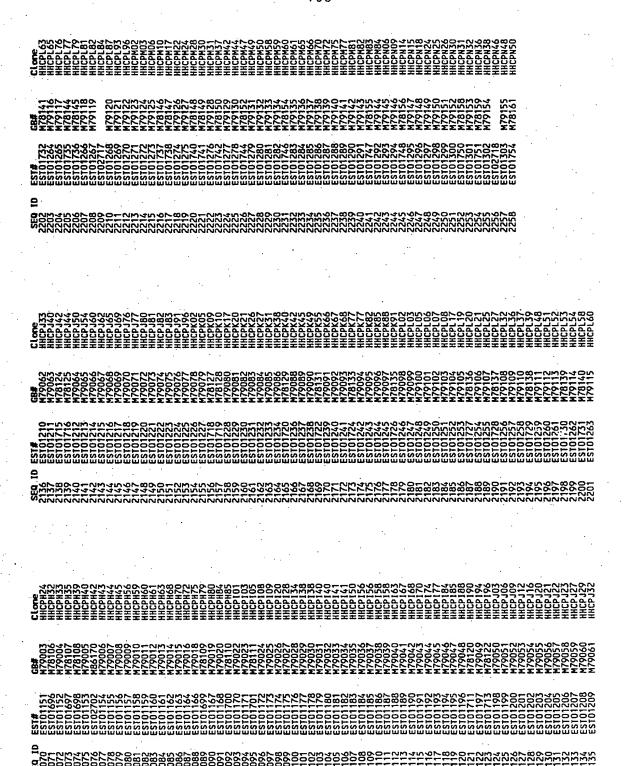




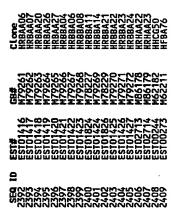


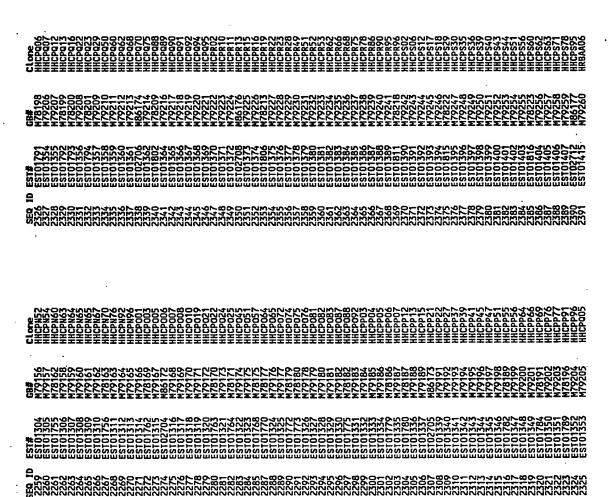






SUBSTITUTE SHEET





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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

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SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: Venter, J. Craig

Adams, Mark D.

Moreno, Ruben F.

- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
 - (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
 - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
 - (C) CITY: Newport Beach
 - (D) STATE: CA
 - (E) COUNTRY: USA
 - (F) ZIP: 92660
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: 07/837,195
 - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 07/716,831
 - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Israelsen, Ned A.
 - (B) REGISTRATION NUMBER: 29,655
 - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 619-235-8550
 - (B) TELEFAX: 619-235-0176

SEO ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTT GTTCCCCTCA GTGTCCCTTT TAATTGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG
TTATCAGAGG AGCAAAAACA TTTAAGTGTC AAATAATGCT CATTGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

AGAGGCAGA AAGAGCTTCA CAAGGTGTG GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTC TCCCATTTTA
GGTCCCCAAA AGTAGGAGGT GGGGCCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAAG CTGCAGCCAC CATATGGGGC
ACTCCTGGCT GGTGTACAGG GTGGGCCATTG CCCAGGTCTT TT

SEO ID NO:2: (Length of Sequence = 214 Nucleotides)

GITTINCTIT TITCTIAGCT TCATTICTCT TAAAAAACAA GGAACAAGAA AACATTGCAC CAGCGITCTA AGCCTCAAAC AAAANACAAA ACAAATCCCC CTGCGAAGAA CAATAAACTT TACATCTCTT TGGCAACAAT AACTTAAAAT CACCCAACTT CCATTCGCTC CAACCACGC AGTTAGTTAG TTACAAAAAT ATTCCNIGIG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTANTAGEA ANGATGATTIG TATAGATIGIT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT
GGTACCCAAA TGGGTGGTTIG GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAAGA AAGAAAAAAA AAAAACTCCC
TGGTTGGGAG GGTGTTAAGT ATCGAGTGTT TTTCCAAACC ATTCCTCCTC TGCTCACCTA CCCCTAGGTG ATTAAAAGGAG
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT
GATCCCTGTA TTATCAAGGC ACAG

SEO ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCOGGIAA COGAGGOGGC AAGGAGGCCA GGIAGICCCG GCACCICTCA CICTGCAGAG ACCAGCGGCT TOGTGGGAGG CCIGIGGGIC ACACGIAGGG GCIAGAGCCA GCCIGCATCC TGCCCACCGG GCICCACITG GAGATCAGCA GGAGGGGCCAG TGIGGGACCC CIGCIGCCAC CICTCCIGGG CCIGIKTCCI TICTGGAAAT TAAGAAGGIG TGCICCAGAG CCAAGAGGAG CAATAAGAAA CCICGIGIGC CAGCITCITA AGGIKGCAG TGCAAGACCC CA

SEO ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCTTAC ATATATATTC ACAGAAAATC ATATTCCATA TACTCTTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC
TAGGACACAA GGGAAGCAGG CCAAATTTCT CATATTTTCA GGAATAAACT GAGTGCCCCG AAGGTGTAAT AGGAACCTTT
TACTAACCTC ATCTGACTTC ATCCTCACAC CAGCATTTTG TGTGTAAGGA AACTGGCCGA GAGTGGTTAA GAAATATATC
CAAAGACGTA TAGTTCCAAA TGGAACACGG ATCTTTTTAT TTAAATTCCA ATCATCTTTC CATTATATCA GCCAATGATG
GAGCAGAAAG CTGGTCCAGG CAATCCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNCA CCGCACTTAG GTTGTTTTGT
GCCCAGCTTT GGCAGGAAGC ATTCCTCCTT TCAAAGATTN NAGCCTTGCG GTCATTATATC GGGTTGTATA GGGTTCTTTT
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SEO ID NO:6: (Length of Sequence = 359 Nucleotides)

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GAGCTCCAAA ATGCCTGCAT TAAATGCATT TITTCCACACT AATGCCAATC ATCCAAAGCT ATTITCAACA AGTCAGGTAT
TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACCATTT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG
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SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

AACTIGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGITAG AAATCATTGC TCAAAAGAAR
AACCIGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGITGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTC
AAACAACTGT GGATAAAAAA GGATTTTTCA ATGCCATTAA ACAVCAATGC AACAGTAA

SEO ID NO:8: (Length of Sequence = 345 Nucleotides)

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CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCACTGCCC CCAGCCCCAG TACTTGGGGA
CTTTGCCCTT GCAGTTCCCT GTGCCAGCAA ACTCTTCCTC CAGATGTCCA CATGACTCAC CCNNCTCCTT CAGGGGTCTT
CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT
AATGTCTCAG GAATTCGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NIGGAGGCCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCCAT CAGAGGTTTA
TACAAAGAGA GAATGACTGA ACTATATGAT TATCCCANGT ATAGTTGCCA CTTCAAGAAA GGAGAACGGT GTTTTTATTT
TTACAATACA GGNTTINAGA ACCACCGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCCC CACCTGCTGG ACGCGAGGGG CTACTACGAT GCCATGGGTG TCCTGRTTTT TTATTTCTCA GACAGGACTG-CTCTGTATNT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAAATATTA CATTTGTCAT GACCAGAAGA AATGTCATTA TCGTAAAATT TAGATTCTGG NGTCTATATA TGNAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAAT GTGGGNTGTA TATCTACARG CCNGAGCCGA CTTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGIGATA AAAWIGGIAG TITCATGITA TCIACAAGRC TAAGKICAAA ATICCATGCA TGIGCIGRTA AAAGACCCAT NATGGKCCIM ACTGIACTIA CICCCCATTI ATIAGCATIC ATICIGGICA CCAGCICIAG TTCCICTGCT TAGGGAATCT CGCTTGICIT CAAGATGICA TICAAATGIC ACATTTIGIG GGAAGCCTIG CCTTTTITGA CACGGICTCC CIGCCAC

SEO ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGCCGAGAG GCITCIGGAG AAACCCACCC CACCAACGIC TIGATCITIGG ACTITTAVCC TICCAGAGCIA TIGAGAAAACA
AVITTCIGIV VAIVGVGGCC ACTICAGCCIG TIGATACTIGG CAGCCCTAGC AAACTCATAC ACACATACAT TITAAACTICG
GITTAATCCI GIGRCCATIC ACTITATGGIT CAGITITTAA ATAGICCTAG TICTATGVCC ACTIGITAAAG TICACCAGGA
CATAGGSCAT TIGGGAAAGG GGCCTGTAAC TICTTGGATTA

SEO ID NO:13: (Length of Sequence = 339 Nucleotides)

VCIVICIVCC AACITCATIC AGATAITGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC
CATTITTVIR ATTGATGACA AATCAGGGAA CATTCATGCC ACCAAGACGI TGGATCGAGA AGAGAGAGGC CAGTACACGI
TGATGGCTCA GGCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TCGGAATTCA TIKTCAAGGK CCAGGACATT
AATGACAGTC CTCCGGAGGT TTCCTGCACG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT
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SEO ID NO:14: (Length of Sequence = 342 Nucleotides)

GGEVECAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACTCTTG GAAAGAACAG GCTACACACT
TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA
CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCCATTA TTTGAGAAAG CTTGGACCTA
TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACTGGTC TCAATAGAGG TTAATGCGTT TGTCACTTTT TTGTACAAAA
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SEO ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGITGATGC TGAAATIVAA GATCCACCAA TTCCAGAAAA ACCATGGAAG GITCATGIGA AATGGATTIT GGACACTGAT
ATTITCAATG AATGGATGAA TGAGGAGGAT TATRAGGIGG ATGAAAATAG GAAGCCIGIR AGITTYCGIC AGCGGATITC
AACCAAGAAT GAAGAGCCAG TCAGAAGICC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTCGAAAG AGGAAACATT
CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTCACGGGA AGAAGAGIGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG
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SEO ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGIT TCTTCCAGGA TGAGAAATCA GIGGAAAGIG AGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA
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CCCAAATTGC TAACTTGIAT TATAAGCAAG TACAATGGIC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC
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SEO ID NO:17: (Length of Sequence = 415 Nucleotides)

ASCAYGGGCT GGGGGGCCGG GAGTTAGGGC TGGGGCTTGT TTTACGCTCT GCCCCCCACA CCCCCTCCTC TTCCGTCCTG
ATTAAGCCCA AGGGTTGGTG GACTTAACTT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATTG
GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCATCTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA
ATTGGACCAT TCTCTTAGCG TTCGAGTGTG CCGGCCAGAC TGGCATTCAG TACACGCTGA GATCCAAACCA CATCACACTG
GCCTCAGGTC ACCAACTCGC CACTCAGGGC ACAAGGCCTG CCCTTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC
CAGGTGAACC ACAAG

SEO ID NO:18: (Length of Sequence = 356 Nucleotides)

GIATGIATGI CIGIAGGIAT TICIATACIT AACCATCIGI GICCCAATTA AGCIAAACAT GATICATICI GATGCCAACC
CCCATCCATC ATGCCATGGA TCGCTCTAGA CITCTTCCCT TGTAACCTCC CACTCAAACA GIGAGAAACC TTTGCCCAGT
ATGTTTTGGA GTAACCTCAC TGGGAGTTTG CAGTCCCACT AGATGAATGC CAACCCATTT GITCATTTAA AAGGACTTTT
GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGITC ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG
GAAACTCTAG GGGCCACAAG GGTCCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCITCCA TITITITIAG TITTAAACCA CCAAACCAAT ATTITYCCIT TAAATTITAA TCITATAATA TAGAAATCIT ATGITAAATGA AATTITGICA TGITTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGITT AAATTITACAAC TTACATTAGG GGITTGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT CTTCTAATGA GGICACTACT GAACATAATT GITCCCTCTT CTGTTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA ATTATTGCCT TCTKGTTAA

SEO ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GITCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC
TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA
TTAATCAGAA ATTTTCAAAG CTTGGATTCT AATGATATGC ATTATCATTA GACATTCAAA TGCTATACAT CTTCTGATGA
AGCCTCCTTG ACAGCAGCTA CACTTATTTC ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC
TCCCCACTC TCCTCTTGGA GGAATGAAAA GATGTGGCCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT
CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEO ID NO:21: (Length of Sequence = 385 Nucleotides)

GITTGATTIG CITTITTITI AGAGITTIAC ATCAGIGITI TICAGGAATA TIGGICTITC ATTITCTITI CITGGAATAT
TITCTAGITI TACITIGICA GAGIAAATTC TGGCITCACA GAATTATTIG TAGICTCCC TGICTIGGIT TATTCATGCT
GCIATAACAA AATACCACAG ACAAGIGGI AATAAATAAC ACAAATTTAT TITTCCCAGI TCIGGAGGCT AGGAGITCAA
GAAGCIGGCA AGITCAATGI CIGGIGAGAC CCATTCCTTC ATAGGIGGCA CCATCIAGGG GICCTTACAT GRCAAAGAGA
TGGAAGGGCC AAAAAGATGG TGACCIATIG TGAGGCCTTT TITTAAAGGGC CITVAAATCC CAGIC

<u>SEO ID NO:22:</u> (Length of Sequence = 374 Nucleotides)

ACCITCATEG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTTGCCTGGA GACATTTCTA
CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCCT GCCACCCTAC
GCCGTAGCCG TCCAGAGACTC GGCAGGCCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA
AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC
AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTCGTKG ACCGTGTCAG CCAC

SEO ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCCGITCCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCTGA ATAATTTACT
GATCGIAAAG TCTAAAAGTA TCAATTTCAG GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA
GGGTATTTCC TTCACGTCCT CTGAAGAGTT TCCCAGAACA TTCTTGTGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC
AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTTCTTCC AGTGGAGGAA
GG

SEO ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEO ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CIACTICATG GCIGGGTCCA GCAGAAAAGA GCAGACGCIG GCCICAGACA CAGACAGCAG TCITGATGCC TCGACGGGAC CCCITGAAGG CIGTCGATGA TAGGITAGAA ATAGCAAACC TGICAGCATT GAAGGAACTC TCACCICCGT GGGCCIGAAA TGCITGGGAG TIGATGGAAC CAAATAGAAA AACTCCATGT TCIGCATGTA AGAAACACAA TGCCITGCCC TACTCAGACC TGATAGGAIT GCCTGCITAG ATGATAAAAT GAGGCAGAAT ATGTCITGAA GAAAAAANIT GCAAGCCACA CITCINGAGA TITTGITCAA GATCCATTIC AGGGIGAGCA GITAGAGTAG GITGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT
GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCACG
CCACTKCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAAG
TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAAT GTACAAATTA AATATTAATG ACCCATAACC
CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTTT

SEO ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG
ATCGTAAAGT CTAAAAGTAT CAATTTCAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG
GGTATTTCCT TCACGTCCTC TGAAGAGTTT CCCAGAACAT TCTTGTGAAA AGGAATGCCT CCCAACAATG GAGGAGCAAC
AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GGNGTTTTC TGCTTTCTTC CAGTGAGGAA
GG

SEO ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTATT AAAGGACCAC CCTGGCTGIM GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT
TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA
CTTTACACTT TTTTAGATCA GTCKATTCTT GATGTCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT
ATATTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCIGGAA GCAAAGGAGG ACCIGGCICC TGACTCICAG AGAGGATAGG CIGGGATCCC TGGGGCAGGC CIGITCCITG GCIGGCCAAT TTAGTCTTIC AATIGTCTAA GGGCICICCA TTGCCIGCCC TTGCCICITT CIAGCCIGIT ATITCIAGGC TCCICIGAAT AAATCICAGG TTTCCTACIG TCATGCCITT AGITCAAAAA TGAGAATCIG CCCTACAGTG CIGGCCICCI TCCGGCCIGA AAGCCAGCAC CITKCGACCC GG

SEO ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGCCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT

AATGGGTTGC CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG

AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAGGGAA

TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA

AGGACCTGTG TCCTGTTAAC CATTT

SEO ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAAACT AAGTGTTCTA CTTAGCTTCT
ACAATAGTTA TTCCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAAATGA
GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTTGTCTTT ATGTCGTATT AATGCCAAAG ATATTGTCAG
GGATTATTTT AAAGAAGCCC TTACTCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC
CTGGTTTGAG GGGCCAAATT AAG

SEO ID NO:32: (Length of Sequence = 153 Nucleotides)

ACAGGATGGT CAGGACAAGC CACCICIGGT AAAGTGACAT TIGAGANGAC CCCIGAAGGN GGGGGGTIGA GICATGTGGA CATCITGAGG AAGAGITTAC TGGCACAGGG AACIGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEO ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAAGCTTC AGGACAAATT GTACAAACTT TACAATGTGG GATTTAAATT

TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GYTACCAGGA TTGAAACTTA TAATAATCCA

TGTGGGAAAG GGAGTCTTGT TTCCTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNIG TAAAGCTTTG

TGGTTAGTTT AAATTAT

SEO ID NO:34: (Length of Sequence = 307 Nucleotides)

CROCCACCCA TATCTAATCC AACAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCCTTC TCAGCACCCC

CACAGCTGCT GCCCCAAAGG AAGCCACGTC ATCTCTCACG GAGATTGTKC AGCAGCCACT GCCTCCTTGT CACCTTCGCC

TGTGGTCATT CTCCCCACAT GGCCAGGGAA TGCGTCCTGT TAAAGTCTGC TAGGTCACGG TCCTTCCTAC TCAAAATGCT

CCCYTGGCTC CCACTGCCCC CAGAGTAAAA AGCCCAGACC TTCAAATGAC ACAAAGGCCT ACAACGA

SEO ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGIC ATCAGATRCC TGCINGATAA TATATAAACA GTAAAAACAA CTTTCACTIC TTCCTATINI AATCGIGIGC

CATGGATCIG ATCTGIACCA TGACCCTACA TAAGGCIGGA TGGACCTCAG GCIGAGGGCC CAATGIATGI KIGGCIGIGG

GIGIGGITGG GAGIGIGTCI GCKGAGTAAG AACACENITI TCAAGATTCI AAAGCICAAT TMAAGTGGCA CATTAATRAT

AAACTCAGAT CIGNICAAAA GICCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTITGGA AAGACTITGA CCICIGAACA AAAAGCCAGA AGGCTGCITA AAGAAATAGI AAGGTITCA CITGCCCTGG

ATAGICACAA ATCTAGGAGI ACTGGITCAC TGCCTTGGGI TACCAGGTAT CAGCTCTITC ACAATCTCTC CTCTTCCCAT

GCTTCCCCTT AAAGTCCAGI TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA

ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT

AGGGACCACG GTGCCCAACC TGTAATTTTA TTTCTAACTT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTTG GCTTTTCTAG ATGTCATATC CAAACTTCGC AGTCATGAGA ACAAAAGTGT

TGCCCAGCAG GCCTCTCTA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACACGGCAT CATCCCATCT

CTAATTTCCC CTCTGTCCTC CATCCAGCGG CTTCTTCCGC TTCATTCTCT ACCATACCAC TTGTGCATGC ATGTRATGTT

CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTTCT AAACCTATAG TTAGTGTGAT CATGACTTTG

GTCAAAAGGCA AGTYTCCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTIGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG

AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCCGCGTGCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG

TGCCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC

CCATCATCAT TCGCCGTTAC CTGCCCAGATG GGAGCTATGA AGACTGGGGG GGTKGACGAG CTCATCATCA CCGACTTGAG

CTGGAGTCAT CTTTCCTGMC CTTTGCCCCCA TGCCC

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCIGAACC CGTITIGGGA AATAATGGGA TICCITGATC ACGGGACAAC GAATCACCCT GAAGITITIC
TCCAGITTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA
TACCATGCTA GGCATTACIT GGGAAGITAT GAGITGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAAA
TTTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEO ID NO:40: (Length of Sequence = 178 Nucleotides)

GGIGICGGGG GCTAGAGATA CACATGCCAG INCTATACAT ITCICAGCAC IGIGCIGICG ATTCACAGCA GITCAATIGT TCATGCGATA TAAGCCAGIC ATGIGGCCCA AGITATICIG TCGGCIGIGI TCTCTGCAGG AATCIGATGC AAGAAGGCCI GAAGGATGCA TGGCTITT

SEO ID NO:41: (Length of Sequence = 322 Nucleotides)

TECCTTCIT TAGAAATTA GEGCAGTGIG ATECTTCCAG AGGICTGIAC AAACACCAGC TITCATTGIG CITGEGAGTT
TCCATGCCTC TYCCITCTCI TCGCTTAGIG CACGITTCTG CITTTTATCA GITTGACTGC CICAGACTGA KTCCAACAAC
CCAAACTGAA CGCTCAGCTC CICCKTTCA AAGGAGGATG ACTINICINA ACAACTATTI AGGTGAATTA TIKCKACAGT
TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGIG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG
GT

SEO ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTIGGC ATTITIATIC AGACACGIAT AAAAACAAAA CAAAAAACTI CAGIGATACA ACAGACGIIT TCCCTTAGIIT CCCCTACCTAG GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTTCTG TCCTACCTGG AAGCTGTCTC ACTGCTGGAT GAGAATGGCT TCTAAAAAGTG GATCTTGGGG ATCCTTGTGA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA TGTGGATTAT GGTTTACACA AAGATGTCCA GTTATTTT

SEO ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAATC TCTGTGGCCC ATCTTCAGGA TCCACCACCA GAAAACCCGT TACATCTTCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA TTAAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAAGCAAG GTTATGTGTA CTTGT

SEO ID NO:45: (Length of Sequence = 305 Nucleotides)

GEATTGCCAG GAGCTGTTCC AGGTTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT
TGGTGAACTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGGA CTTCAACCGG
CCCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG
CATCACGGGG GGACCGGAAC AGCCGMCTGG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEO ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCINNGC CTAATTAAAA GATTCCATTA CATTTACTIT TATCATTAT ACIGCCAAGG ATCAGICACA
AAAAATTCAA ATTATACATA TTATTCATGC TTTAATTTCA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA
TAACATAGGG AAAAATTACT GITTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGIGITGT
CAAGTTGGKA CAGGITCCAT CGAT

SEO ID NO:47: (Length of Sequence = 175 Nucleotides)

GATCICITCC AGCGICAATG TACTGGGACA GCAAACACTC ACATTGAAG TICCTICTGG CCACCGGCIT COCAGTACAT TGACGCTGGA AGAGATCATC TCAAATGGIT CICCAGTGIC AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG GCTTGTATGG GAGCC

SEO ID NO:48: (Length of Sequence = 270 Nucleotides)

GICTGTCAGA GCNACCGGGC AGCTCAMRCC CACAGGGGCT CCTCATCCTC TGTGGTGGCA TCCTCATTCC ACTCTCATCT
GCCACCTKCT CAGGGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTTCTCCT GCTGTAACTG CTCCTTTTCC
TTCTGGAGCA CACGCAGGCC TGACCGCAGC TGTGTCAGCT TCCGCTTACT TIMTGACAAC TGTACCAGGC TAGAATCCTT
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEO ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAATAATA
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCCGGGAAAA GAGTTGGGGC AGTGAACTTC CCAGGCCGAC
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA
CACCCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAAC
TATTTACTGT TAAAAAATCT GTGACTTCAT GGARGTGGG

SEO ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GMGAGKCTCC AGGATGAAGG GGAAAARAGG CCGCATGCCA GTCACCTGGC ATCINCCAGA GAGGGYCAGY CINCCCACTG AGACTGGGGC ACGAGTCCCG TCATCACCAT GCCCTCTGAC TGTCGAACTG TCTTTTTACC TGACAAATAC TACACAGGTA TCGMTCGTGG CCATACTCTG CTATCTAAAC CCAGGAACTG ATTAGATTGT T

SEO ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGA CACTGGCAGG ACGCAGCACC CCCCGACTGG CCCTTGGCAG GCTGCACCGG GCGCATGCGG GTGTGGGCCCA GGGTTGCTTT AGGAAGCAGG TGGGAGTCTK NCACGTGCAG KCGGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

SEO ID NO:52: (Length of Sequence = 408 Nucleotides)

GETGGGGCAA GETGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACACGT GGGTMCTGGC
TGGGTGAGGC AAGCAAAACC TGCCTGCACA TGGCAAAGGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT
TGGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGGG CCACCCCACT GGGGGTCTCC AAGTGGTCAA GTTCCGTCTG
CCAAGATTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTCACA CTGGGACCCT
GCAAGAGGCC AACAAGATTA AGGGATGCTT CAGGTCAGAC TTGGCCCTCT TCTTATGGGG CAAGACCTTC CCCGCAGAGT
TCAGATCT

SEO ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGCAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTTAAA AACTAGGTCT TCCCAGGTAG TTTGAGGAGC
ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGGTGT AGTGACAACA TGGACCATGG
TGGAGTGACT TTAGACGGCT CTTGGGTNAG GAGAATCATC ATGTAACAAA GCATTAAATC ATTTGGAGAAA
NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTCGTCCA CTGGAGCAGT GGTTCTCAAA CTCGTGTATG CATAGGAATT ACCTGAAGGG CTTGTTAAAA CACAAACTGC AGGGCCCACC CCCAGAGTTT CTGGTTGGGG AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTCACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEO ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GICAAACATA CTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCCTG
ACCICTGYTT CAAACCCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGGG GCTGCACAAG
GTCGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA
KGCAAGCTCA TT

SEO ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATTCT AGAAGGAAAA GGCATGGIGG GAATTCAGCA CCTGAACTIG TATTTACACC AGCCTCGGCA TCTGGCAAGG RAATAGCGAT TGTTCATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACTG ATCTAGGGAG ACTCCAARGA TCCAACAG

SEO ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA
TTAGATTGAA ATAATGGACA GAAACACATT CTTGTCAAGA AAGGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA
GCAAAAGTGA AATGATTTGA GGATTTCTGT TCTAATTGGA GATGATTCTC TGGTTGTTAG AAATGGCAAA TATTGATGAT
TGTGTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTGTC ACTT

SEO ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCIT CITGCCTTCT CIGIGCTCTC AGIGGITCCC TICCCIGAAG TGCCTCCCTT CICATTAATT ATAGCCIGIG
TCIGAACATT GIGAGCIATA AGAACCCICA TATTAATGGT TAAGGGACIG TIGGAAATGA TGIGATTTTA TTAAAAATGG
GGTCITTGIG GAGGAGICAG GAATGGICAA AATGAGCTTC AGGIATGGGG CITGCTCTRT GCTCCTGATA CCAAGGGTCT
GGCAAGCACA AAGGAAGGIG G

SEO ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CIGAAGCCAC TATATCTGCA TATGTATCCC AGATTTGAAC AATTAAGTAA AAAGATCGTG AATGATGAAA
GCCAGTTTC TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA
GTGTAGTTCC TGTTGCCTTT AGTCTTATAG ACTTCATTTC CAAAGGTTCT TAGCACCCCC CTTCCCCCTT TGGTGAGGTT
GTTTCACATA TTTTCTAGAC AATTAGATTC TTTTGTCAAA GTCTGTGTC CATCCGGAGA GCCTCTGATC TCTTAAATGA
TTTTTTAAAT TTACATACAT TAAGGTTCAC TCTGCTGTAA AGGTCTGTG GTTTTAATCC TGTCTCACAG TTTTTGCATA
TGTTGGCCTT CTGCCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCCTTATCTT CAATCAGATC

SEO ID NO:60: (Length of Sequence = 466 Nucleotides)

GIGITICAAG GGAAGGCAAC IMCAAGITIG TGCAGCIGAA TITICIGIAAA GITAAGACAG ACICAMCITC TCATTCAATC TGGGGCAGIG GATAACCITT CIGAATAGAC CCACITGITC ACGGACAGGG ATAGACGITT GCCITICTIC TITICCITGAA TITIGGAGIGA GCACTAGGGA GGGGAAGIGC ATGGGIGACA TGAAGAAGGI GAAGATGIAG TAAAAGCATC ATCCAGGITAC ACATTAACGG TGCIGCAGAA TITITCACAAT ACAACTGAGG GAGTCIGIAG TGGCAAAAGC AATTACTGAG CACAAAAGCC

AGRICICAAG GECHEATTIC ACCITICCTIG TICCAGGGACT TICTICAGCAA ACTITIGITICA TICAGCAGTIG TICGCTTTIGA TIGGICTTAGC CAGTITITIGG TICCAGGGGIG TICCTICTIGGT ACTAGGGCTA GGGCAGCTIGT TITAAAG

SEO ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAGAG AGCCCCTCAG GGCAGGTCGG
GCCTAGGCCA GCCCCCCGC AGGAAGAGTC CCCTTCCTCT GAAGCAAAGA GCAGAGGACC CACCCCACCA GCCATGGGCC
CACGGGATGC CAGACCTCCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCCACCAAG
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGGGGCG AGAAGAGCGT GCCAAGTTACC TGGCGGCCAA
GGAAGGCAGT GTGGCTGGGA AGGAGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGGC CCGCTGCCGG
TTTTAGGGAG CAAACGTCTT AAAGCCGAGC AACGCCGTTC AAGCCTTGGA GGAACGGCTA GCGGAAGAAG TTTGTGGAAA
ACAAGGGGCG T

SEO ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTEAET ACECAGAECT CAAAACAGAC GTGTTCCAGA GCCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCCTCCTC
ATAGAGCAAG CTCTGTCTCA GGAGGAGGTC TGCGATTTGC TCCATGCCGA CCCTTCCAAA ACATCTTGCC TAGAGTCTAC
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGGAAGCCAA GTATGCCCCG CTCCACCTGG TCCCTCTGAT
CGAGCGGCTG GGGACCCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CCTGACCAAG GAGCGGCTGT CTGTGGCTGT
CCATGTTCGA GGTCATCCTG ACCCGATTCG GAGCTACCTT CAGGACCCAT CTGGCGGGG CACCGCCACC AATGCGTATG
ACGTCGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTCGTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEO ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAAGT GGGGGTGGGC CAGGGGGCCA GGCCCAGCAT GCACCCCCAT TTTTTTTGGGG GCTGATCCCT GCCCCAGCTC TGCTGATACC CGGGGCCACA GCGTCAGGCC GTTGGGGGTG GAGKTAGAGG TGGGAGAGCA GGGGAGAGAG CCTKAGGAGC CACAATTGGG CAGACAGAAG CGG

SEO ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATIGCA CCITACAGAC TIAGGGAGCC TITACCAGAG ACGCCTAAAA CGCCCCAGGI TCAGCCATIG TGCIGAATAG
AGIGGAATAT AGAACCAGGG ACAGAGIATI TCATTITAACG TIGATATATA CITGCTAAGG AAACACTAAC AATACIGTAA
CITTGITAAA GGACATAGIA TIGAAATGGG AAATAGAGGI CAGGCTCACA TCATCITAGI TIAATGCTGG GCAACITITT
CIGATTICTG TAGITCCCTG GAAAATGIGT CCITCGTACC CATAAAGIGG TACAAATGCA TITTGTAACCA TITTTG

SEO ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTTGCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTC TCAACCTACA
CGTTAAAAAT GCTTCTTGGT GTGTTTGGGG AGGGGGAGAG GGAAACTGAG CTCTCTCTTG ACCTCCTCCA ACACCCTTGA
CTTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGGTGGTC ACAGAACACT GGGCGGCACT CGGCACACAA CACAGAACCG
GGGCAGTCCA TGCAAGGTGCG GGAACACATG TCCGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAAACCGGA
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCCG ACGGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG
GCCACTGTTT G

SEO ID NO:67: (Length of Sequence = 413 Nucleotides)

CIGCICCITA IGITITIATI TCCAAAGITI AGAATIICIT IGCITCATAG TATTATITIA TITTACIAAA TIACAGAGIA AGAAAAGCIT TICATITIAT CIGATITIAT TCITAGAACA AAAATATTAC GATCIICIAT ATTITIGIIC TITIGCCAAA AAGIGIAGGC AATITIACAT CATCITITIT CCCAATCAGT TIGIGATCCA ACTATAAAAA GGAGACATAG AATACIGAAT AAATGAAACA GAAACICCAA GGCCAAGAAG TGICCATCTI GAAAGAGIGI TAGIGGCAAG ATATGIGACT GCAGACTAGA TGIAGACAAA CCIGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCIATITI AATAAATGGI GCIGGGGAAA ACTGGCIAGC CATATGIACT TIA

SEO ID NO:68: (Length of Sequence = 372 Mucleotides)

GCACGETTAA AAGACCAACG TGTGTGGMTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAAA GATCCTTTAC

TTTGCAATAA TTTGAACTGG AGAACCAAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT

GAAGGAATCC ACCTGCATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAAG

TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA

AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEO ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCCT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT

AATTITAGTG GAACAAAGCC TGTGAAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT

CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTTCCTT TCCTTTCTTT GCTTTTCTTT CTCTCCTCT ATACTTTCTC

TTCTCTCTCT TTTAATTTC TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT

CCCACTTCTC CTCAATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEO ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGCCAGCC ATGIATTAAT TGIACATCCA AGGAAACTGI GCCCCAGGGG TCITGIGIGI ATTICTGAGA
AGAGGGGIGA GAAAAGGCAC TGIGICAACA TTIGCITCIG CCIGAACGIG CACCICCCAG TGCICCTCCA TCAATTAGGA
GAACIGICIT GAAGAATGCT GCCTCAGCIT CIGAAGAGAA GACCCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG
CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCCC CCAGIGGAGG CCTGGAGCIT GITGACCANN GCAGCAGGAG
ACCCCTGCT

SEO ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCCTA CCTGCAGCAC

CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA

CAGAGTTTTG GAAGTTCAGA AGAATGCTTG TGGTGCCCTT CGAAACCTCG TTTTTGGCAA GTCTACAGAT GAAAATAAAA

TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTTGTTGC GGCTGTTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG

CTTGTTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAAT GACATTCATT CGAGATGCTC TCTCAACCTT

AACAAACACT GTGATTGT

SEO ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTITT ATATECTICA CITAGECTIT CATTIGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC

TCTCAGATTT CAGTTTTGGA CATTGCACAA CTAAGACCTT TTAAACGCAT TINCTTGCTA ACTCGGAAGA CACATAGTCT

GCAGCAAGAC ATTCCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT

GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAAA TTTTTTTGCAC CTAATGTTCC TGAGGTACCC

AGAATGTCTG GGGTT

SEO ID NO:74: (Length of Sequence = 402 Nucleotides)

SEO ID NO:75: (Length of Sequence = 454 Nucleotides)

GRACCCOGGG CCCGCGATGT GGCCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTGCTG
TGTTTTGATG TTGGTGGCTA AGCTCATCCA GTGTATTGTG TTTGGCCCTC TTCGAGTGAG TGAGAGACAG CATCTCAAAG
ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGGA AGAGGTGGTC
ATGTGGTGCC TCTGGTTTGC CGGACTTGTC TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTCGATTTG AATATCTTTC
CTTCTCGCCC ACCACGGCGA TGAGCCAGCCA CGGGTCGAGT CCTGTCCCTG TTTGGTTGCC ATGCTGCTTT TCCTGCTGTG
GACTTGCGCC CGTTTGCTCA TTACCGGGTA CACCACGGAA TGCACACCTG GCTT

SEO ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTGATAG CIAGTIGICI AAAAGIGCIG NITATTAAAT AATCCACCIN TITCCCCACT TAAAACATCC CICTIACCAT
ATACTAAATT CCNGIAGCCC TGGGTCIGIT TCIGGACTCI CCCGICTGIC TGACCCCCCC CAGGICACAC TGAGIGAGGI
AATGGIGGCG TGAGAATCCI CIGGGAATCT GGCAGGNICA CCCCNGAGCA GICCACCCCN CAACICATTA NCATCGITCA
GAGIGGNCIG AGTGNICICA CACATTCACI CIGCCAAATG CACITTAGGA ACIGICAAAT TCCAAAGITT CAA

SEO ID NO:77: (Length of Sequence = 446 Nucleotides)

CRASCOGTA GCCCTAAGIC GITTITCCAA TITAGGAAGC TCACAACGCA GATCIGCATT GICACGIACC AGCIGITIGI
GAACCITIGI AAGCIGITCC AGGITGITCI CAAGAAAGGA AATCITCIGC TITIGGGAGT GAATCCCCCC ACTGICITCG
GGCICCATIT CIGCACITIT CITGACICGA GICGIGACGI CITGAACGAA CAGCITGCGA AGGITGIGGC SGGICTGGAG
TICCCGGGCA ACTGICTCCI CCAGACCCIT GAGGICCIGC TIGIGACIGC TCAATGICGC TCGIACAGAA AIGICAGCIC
CIGCAGCITT GGIGCICTIC TCGIGGITCT TCGCICTITC AGCITTCICG TAGICAAGCC TGAAGGCTIC TCTAAGCICT
AACTGGAGCT TCTGAITTAA GGICTITTGA GCICATCAAA TGGICT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCOSSIGGO GCAATGGAGA GAATGIGCOT GAGACAGAGO GCCTGGCTGG GGAGGAGGCA GCCCTGGGAG COGAGGAGAGA TCAGGAGGAGA ACCAGGAGACA AGGATGATGA AATCAACCAA CAAAGCCAAC TCATAGAGAA GCTCAAGCAG CAAATNOTGG ACCAGGAGAGA GCTGCTGGTG TNCACCCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTTCCTGC CTGGGAAGTG ATGACTCGCA GGTCGGGCTT GCGGCTGGGG GCTCCAAGCT GGGTGCTGTG GGTAGGTGGG GGCGGAGACT TGGCAGGGAT GACCTTGTTT AGGCTGTTGC CATTGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT GACGTAGCCA TTCCCAACAG GGCTGGGGCA GGCTCCGTTA GCACTGTTCA GGTCACCNCC CAGCATGGCC CCCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTTCCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

ATGATTOTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC
GAAAGTATTT CTCCTTTCCT GTATTCTTT TCAAAGTGCC GAAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA
ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC
TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTTGGTGGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC
CAGGTGTTAC AGACTCGCCT GGINGATGCA GCCAAGGCCC TGAAACCTGG TGCACTGCCA CTGCCTTGAC ATCTTTTATT
AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTITIAAT AGAGACGGGG TITAACCATG TIGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG

GCCTCCCAAA GTGCTGGGGT TACAGGTTTG AGCCTCTGIN CCCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTTGCTGA

GGACGTGGAN CAATCACAGC TCTCCTNTCT TTCCAGTGGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGGNGAT

TTCTGT

SEO ID NO:82: (Length of Sequence =394 Nucleotides)

GGGAACCCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTTGTTCGA GGCCCAGGGA TTTTGGGGGA GGTCACAGTG

TTCTGGAGGA TATTCCCTCC TTCCGTGGGG GAATTTGCTG AAACATCAGG NAAACTGACA ATGCGAGACG AACAGTCTGC

AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA

GTNAGGGAGG AGTTCTGAGT GAATCCAGCA GCACTNCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT

GCCTTTTNAC ATGAGGCAAC TTCGAGTGTC AGAAGCACAG AGGGNTAACA TCACAATCAT CCGTTCCAGT GGAG

SEO ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACITA ATGGCAATTA AAACTCACTG GCAAAAAAAA TCACTAGAGA TGICAGTCCA TTATCITACC AAATAGTGTA

TTTTTTACCAT CTTTTACCTA CACCCTTGAG TAAGGTGGAA TAGGTTAAAG TTACTGGCAT AATAACACTT CATTGAATTC

ATGATAGTAT TTAACATGTT AAAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT

TTCATAAAAAW TACAATAGGT CATACTARAC TTTGACTAAA ATTAAGAATG TKTTTCKTC ATAATAATGC AGG

SEO ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA

TATTTAAAGT CAGCAATAAA GTCACGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC

TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGCAGTAT GAACTTSTGG GAAGGCTTTA CCACAGTGAC

ACAGTAAAAT GTCTCACGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCCTT CCA

SEO ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTCGCA TCGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC
TCTGCTGCCA GCCTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTGRAGA AACAGGGTGT CGTTCATGCT GGTTACAGGT CTGGGAGGCA
CGATGTGGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEO ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGOGTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTCGCCGG GGACTGGAAA
GAAGTCCCCCG NAGGCCGCCT TCGCAGTCTA CACCCCAGCC TGCTTCCCAG CCTACAYCCA GACCCAGCTC AGACCTTCGT
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGGC ATCCCTCTCT GTCGCTGGCT TCCAGAGGCA GGACAGGCCT
CCTGGTAAGC CCGCAAAGTT GCTGACCTCC TGACTTCGTC TGCCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT
TGACTATGTG TCCCAGGTCA TGTCCCAGGT CATGGAGAAG CCCGTGCCAC AGTGACCCTT CCCATACTTC TGGGGGGGCT
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEO ID NO:89: (Length of Sequence = 384 Nucleotides)

GROCCTTCIG GGGACTCTRT TICCCCATTT ATTGCTGCTG TGTCCCTNAC CAGTTCCTTG CAGGATTCCC TCCTTTTAAA
ATGCCCTTAA ATCTAGCTTT GCCTTGGAGA CCCCAGTGGG TGCTGCTCCT GCCGTTTTCT TCCTGCCAAG CCTGAATCAA
TGTTTCATCT CCAACCCTCT GCCAGTTTGG CCCCTCAAAG CTTGGTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG
TGAAGGGAGA AGCTCTTGGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCCTCGC CCAGCTACCC TTTGGCCCCCA
TTGGGCCCTC GIMTGCCTCT CCAGGATTGT ATGTTTCAAG NCTTGTCCTG TGTTCCTTTG TCTG

SEO ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTACC
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC
TACCTCAAGC TGGACAGGGC TACT

SEO ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTCAGGTTC CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GGTGCTAAAT

AAAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCCAG GCCCTCCCTG CCTTCCCCCT CCCTCCTGTG ACCCGCAGGA

GAGGGGGGCAG TITAGATGGA GGGCTGTCTG TCAGCCCCTT CCATCCACTA ACCCATCACT GCCTCCCAGG GCAGGAAACC

AGGGCAGGGC CAGCCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCCACAGCC CCTTCCCACT TGAGTCTTAG

CATGAGGCAG CAACAGAAGC TCTCTCTTCC TCCCAGCTAA GTCC

SEO ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAAT AATAAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCCAGGC CAGTCTAGTA
CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGGG CGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG
GTGATGTCAG GAAGGGCCCC ACACTTTGGC ATGGACGATG CACTAAAAAA AGAGAAAG

SEO ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTITCAAGG GAACAAGAA TOGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA
CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGCGTGACA
TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT
GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG
GGCCCAGTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEO ID NO:94: (Length of Sequence = 423 Nucleotides)

CTICATACTA GAACTGICTG CCATCITTAT TICTITGITT TCAGGAAAAT TGGAGAGAA AGTATITCIT TITTAAAAAT GATTATATA CITTAAGITC TGGGATACAT GIGCAGAACG TGCACGITTG TTACATAAGT ATACACGIGC CATCGIGGIT TGCIGCACCC ATCAACCCGI CATCTACATT AGGTATITCIT CCTAATGCIA TCCCTCCCCT AGCCCCCCAC CCTCCAACAG GCTCCAGTGIT GIGATGITCC CCTCCCTGIG TCCATGIGIT CTCATTGITC AACTCCCACT TATGAGTGAG GGACATGCAG TGTTTGATTT TCTGTTCCTG TGTTACTTTG CTGAGAAATGA TGGCTTCCAG ATTCATCCAT GTCCTTGCAA AGGCATGAAC TCATCCTTTT TATGGCTGCA TAG

SEO ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCCC GATCIGCATA GCCTGIGAAA GCCCACGGGG ACATCAGIAA CCTTCIGCAG CCACCATCCA ATGCCATTAC
TGINAAGTGA GACTIGGCCA CIGIAGCCIG GGCCIGCIGC AGGAGCTCIT CAGAAAGGCA CATGAGGACC ACGGITIGCC
TCAGITICIG GIAAAACACA AGGICIGGAG TGCCCCTGCA AAGGGTATTG ATGGACTICC TGCCAGTGAC AGAGCATGIC
TATTGCAAAC AATTCICTCA GITACGITCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CITTAGCAAC TTTTTCACAT
CATAGAAGGI GCAATCGCTC ACTTGGGAAC ACTACTGAGA GIGACTTCTC TTTTAAAATT GAGTAGCAGA TGAAAAATTA
AAATT

SEO ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCTTTGTAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTTGTCTACT GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAAA GAAATTTAAC CGC

SEO ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCCTGTG
CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAACA
TTGTTCGCAA ACGACTGAAC CGGCCGCTGA CCCTCTCGGA GAAGNITGTG TATGGACACC TGGATGACCC CGCCAGCCAG
GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCCGCNCGG ACCGTGTGGC CATGCAGGAT GCGACGGSCC AGATTGGCCA
TGCTCCAGTT CATCAAG

SEO ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGINITGIG AAGACAGAGA ATGACCACAT CAACCIGAAG GIGGCCGGGC AGGACGGCTC CGIGGIGCAG TICAAGATCA AGAGGCACAC GCCGCIGAGC AAGCIGAIGA AGGCCTACTG AGAGAGGCAG GGCITKICAA KGAGGCAGAT CAGATTCAGK TICGACGGGC AGCCAATCAG IGAAACIGAC ACTCCAGCAC AG

SEO ID NO:99: (Length of Sequence =: 26 Nucleotides)

CCTTTTAATA ATAATTCTGC TGTCTGCTGT GTACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA
AAAACAATAT CCGCCGGGCG CGGTGGCTCA CGCCTGTAAT TCCAGCACTT TGGGAGGCCCA AGGAGGGCGG ATCACGAGGT
CAGGAGAGCC AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GGCGTGGTGA
TGGACGCCTG TAGTCCCAGC TACTC

SEO ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCGG TGAGCCTACA GCTGATCTTG TCAGAGACAA AOGTTAGTTT TACTGAGTCA
CCCAGAGCCC TGTGCTGGTG CCTGAGGGTT TGTTCCATGG GACAGTCTCC ACAATTCCTC TGGGGAAGGG CCACAAATCC
CACAGTGTGT CCCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT
GTTAACAAGC CTTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTTGT
GCTCTACACC AGG

SEO ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTIT CCTGTGGNIT TAGAGCCAAG CTCAAGGTAG TAGGCCGTAG GGNCTTATTT TATTITCAAA CCCCCATCCT CAGAGGCCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCTTA GTGGGAACAG GTTGAGACCA GCACTT

SEO ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NAWIATGGCC ATCITITATC AGAAAAAGTG ACAAAACGGG AATTTAAAAA ATGAATTTTC NATCTGACTT
TATTINNAAA TACACTTTCT TITTINNAAA ACCAATACAC TITCTTTGAG GATGACAGTA TTAGGAAATC CAATTINNACA
AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAAGTGG CACTAATTAC ACAGTAACTA
TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TITTCTGGTT GAGCCCATTT
TCAAAAAAACCT G

SEO ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACIGCG CCCCACCCCA TITOGGIGIN ANCICAGCIC ACITCAACCI ACCCCICCCA AGITCAAGIG ATTCICCIAC CTCAGCCICT TEAGIAGCIG GGATTACAGG GGICIGCCAC CACGCIGGGI GATTITCCIA TITITAGITG ACACIGCATT TCACCAGGIT GGCCAGGCIG GIGITGAACT CCIGACCICA GCIGATCCAC CCGICICGGG GICCCAAAGI GITGGGATTA CAGGIGIGAG CCACCACACC AGGCCCATAT TITICTITTAG ACATGCAGGC AATGITGGIG GGITTGICIG TTAAGA

SEO ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCCTG CATCTATTGA GATAATCATG TGGTTTTTGT ATTTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT
GCGTATATTG AACCAGCCTT GCATCCCAGG GATGANGCCC ACTNGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA
TTCGTTTTGC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGCAC TAAAAGTGTG CTGTATTCAG
GAAACCCATC TCACGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCCTCACCTG GTCACCCCC TGTGCGCGAN ATCCCACTGT
CTCTCTGGGT GTCCAAACTT CCTCTTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT
AACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAACTA AGGITTCATT
CTCAGGTATA CTGAGGTTA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA
CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

SEO ID NO:106: (Length of Sequence = 355 Nucleotides)

GEATGAGGIC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCITC CGTGGACGCC ATTAATTITC

ATGACAAGAT CAGAAAAAGGC TGCGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG

GTGTTGGTGG ACGCCGACCC TGTTGTGGAC AGCTCTCAGA AGCGNTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC

GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCCCCAGNTG GTGCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG

GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEO ID NO:107: (Length of Sequence = 273 Nucleotides)

GIGICICITI TAAAGAAAAC ATACITIATI TIGGICIAAA TIGGAAAAT ACCCAAAACA TITGATAGAA ATIGAACICI

GICAACAGIG TIATTIATAC TAAGATCAGG ACAGITCCIT GAGATCATAC TGITTIATTA CIAAGITIGG CCITIGITIT

ACAAATGIAA TGITCATATI TATTIGAATI TIAAGATTGG TIAAATGITA ATGAAAAGCA ATCCAATIGI TANITITIAG

TAGIGCCITT TCTCTGTATG CCTTAATTTT ATT

SEO ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTITATTIC CITACATCGA AGAAAATGIT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT

CAGTOTTTTG AGGAAACAGG CTGAAGAGGA CGCCCACCTG GATGGGGCTG TTCCTATCCC TGCAGCATCT GGGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGATCGAAA GACCACTGCA
CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGCATTCA CAGCTGGGGG CATGAAAGCA GAGTTCTTTG CAGATGTAGT

TCCAGCAGTC AGGTAAGTGG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNARAG CAGTTAAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACCC
AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTGCTCA CTTCTTTCCC ATTTACCAAT TCAGAGAAAG
CCCGTTTCCT GTTTCTCCT CACCACTTTG CCTTGGCATC ACACCAACCC TGCCTCGGGC TTCAGCTGCA GATCCTCCCC
AGCCCCTCCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTTGTGTCTG
GCTTCCAGCA TCTACCAACC CTTCAGAGCA ACTT

SEO ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCCTTT GTCCAGAGCA AAGCCAGGTT
TCCAAGGTCC CCACGGCAAG GCTGTTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAGTGACCT
CAGGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCCGG
CAGGAGGGGC GGGGCTCCTG CCTGCAGTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTCAGG TGAATCACTC
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

SEO ID NO:111: (Length of Sequence =455 Nucleotides)

TITITITITI TATATITIAA ATGGAATITA TICTATCAAC TGCCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA
GCAGGAGCCC CGACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCCATTG GCCCAGGCCC TGGCTCTGTA ACCATTAACC
TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCCACGT GACTGGGCTG TGTGTTTGCC TCTGTGACAT GGGGACCCCT
GACCCTAGGG GTCTCGCCTG AGCCAGACCT GAGGGACCCA CCCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC
AGCCAACGCC GGGGGTGGG GCAGACCCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTTGACAC
ATTTTATTAC AAAACCAGTC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA

SEO ID NO:112: (Length of Sequence = 398 Nucleotides)

CREATCHEAC AGGAGETETA GETCAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CITTACTCAC
TCGCCCACCC ACTGCTCATC TCCTGCTGTA CTGCCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCCAGG
GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT
GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACTT GACGGCCGTG GAAGACCCAC
TGGGGGGGCA CTGGTGACGG GTCTCGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEO ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGIGICA GIGICIAACA GAAGGGICIG TIAAGGATGC TICTGATITA ACCAAAAGAT TAAGCITCAG AAACAATCIA
ACATACICAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGICAA AGGGCITGIA
AAAACTGGAG CCAGCAACCA TICCACITGA AGGAATCCAT CICAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGIG
CAAATAATCA CIGCAGCACG CCITCIAATA GIGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CIGAGIAAAT
ACCAACTATG GGCATATCCA CATAAGGCIC TCTGCAGTCA TIAAAAAGGA TTGCACTTAC ATGCATGICT GCCATGGAGG
TCTTTCAGGC CAATGGITCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TOGGECCCCA ACCEAGACCT GEGGATGCCG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA
CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNCC
GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC
AGCCCCTAGG CTCCAAGAGC CCCCAACCGG GACCCAACCC TGCCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC
CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCTT GCTGGGGCCCA CCTTTTCTTG
CTTGGGGCTT. CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCTT CTTGGGGGCCC AA

SEO ID NO:115: (Length of Sequence = 293 Nucleotides)

CINGGGGCCA TGTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG
GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTRGCTCRCA AGCTGGAGCT
CACCAAGGCT GAGAAGCACG TGCACAACTT CATGATTGAC ACTCAGCTCA CCAAGCGGT AAAAAACGAG GCTGCTAACG
TTCTCAGGGA GACGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCCTGCT CTAGGGGATT
CCTCTCTCT TTTCCAAGAA ATCCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA
ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAAGA
GAGGCCACGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGGTCCCAC TTCTCCCAGC
CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTTCAGAGA GAGGGTGGGG CAGGCCTCTC CTGGTACTCA
GCAGGGAGGA CACTGGGGCA CGGGTAGGGG TCCAAGGGCC ACTTAATA

SEO ID NO:117: (Length of Sequence = 551 Nucleotides)

TACCAATTAA CCCATCATTG CITTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG
TGGGTACTAA AGATGTTTCT GITTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEO ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGTGCTG AAAGTCAAAG CAGCTTCATT

TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTCACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC

GGAGGCTGAG GGCCTCACCC TTAGCTGAGC TGTCGCGTGC TGGGGAGCCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA

TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGCGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC

TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCTGGAA GTTTTGACTT TGAACCACCA

SEO ID NO:119: (Length of Sequence = 434 Nucleotides)

TITITICGIT AAAAAGGCCC AAAACTITAT TIAGITITCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA
AACCCAAATC TIACAGTCTA GAAGCATGCC AAGACAGAGC ATTITCTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGT GATGAGATTA AAAACAAACC

ACACCIGGAA AGIGGCAGGC CAAGGGGCIG GICCCITCCC CAAGGGCACI GCATITITGI GAIGAGATA AAAAAAAACAAC AACICCACIA TIAAAAAAATGC TAGAAACATG GGATAGITTA GCACCACCAT TGATTCTGGC AAATATTTCA GCACTCACAT CGACTGCACT GAGTTTAATG TCCTTTCTCC AGITTCTCTG CTGAGTAGGG AAGGAGGGAA ACCTGGGGCG AAGGGGCTCC

TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

GETCCCATTG TTAACAAGCT TCTTGA

SEO ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGIGIT AGCAAATGCT ACCATGIGGA ACACTCAACT TIATTIGCIT TATTIATATA TITAACAATT CTAAAGTATT

TACTICTICC TITGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCTTTAGGA GAAAAGGGTT ATATGIACAG

CTATGGAGAG TITACGGTTCC CCCTTTAACA AAGGCAAATA TTAATAAAAA AGGCCTCAT CGGTCAAAAA AGGCCTAAGA

GCTGCAAGCA TTTATTCACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTICITICE TTAATCATAT CIGATECTES GATGIGGGTA ACCCCAAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA

AAAATACTICE AATTITGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTITG CITCACAGTT AGGATGAGCC

ATCTCTTAAG CIGCAGGCTC AAATGGGATT AACTGAACTC TATACCTGGG ATGGGCCAGT GACTGAGCTG TCCATGCAGA

AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA

GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCCCT CCCACGTCAG

AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCCTCC CTTCCCTTTC CTGCCCGAAA GGCCTGCCTT TTCCTGAGAC

ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGGG CTTTTTGCTC AAAGAGCTTT GGTT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCIAAGCA GGIAGACATC CGCAAAGTCA GATGCTITCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA CATCTTGGCA TCCCCACCCC AGGAAGTGCG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)

ATCCAGGCTT TCATTTCIAG CCAACCCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTTG TAACCTTCAG
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTTCTTATAC AATCTATCTT GTAAAGTACA TTCCTCTAAA
TTTACATTAT CTAAAATTAA GGCTAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT
ATAA

SEO ID NO:124: (Length of Sequence = 330 Nucleotides)

GOGCICTITI

CATAGGCGIA CATAGGCGIG CICACCCTCC TCCCCACGCT CCCCCCCCC AGGCAGGIGG TGTAGGATAG AGTGGIGCAT
COCCTTTCTG CITCAGCTCA GCCAGTGGCC GCCCTGCTC TTCAATCACT TGTTGTCCCT TCTGCTGCAG AGCTAGTTGG
CCCTTTCTG TCGATGTCCT GCAGTGGCC GCCCAGGTTG CAAGGAAGGC TGCCCGGTGC CATTCTGGGG GTGAGTAGGA
GCGCTCTTTT

SEO ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCCC TICGGITCTC CATTIACCGA GCCACAGIAT TICTIAAAGC TOGITGGCAG CCTGCACCCT GCTTATTCTT
GGGAGACACG AGTTIGCATC CTATIACAAC CCATAGITIT TGCATAACCA TGGIGAGAGG AACCATCCTT CCCAATCCCA
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CWITAACCTT TCAGAATCAC TCATAAGTAA ATCCTATAGC AGTCTCTGCT
AATGCAAATT TCAATGTGTG CCCCCTTATT AGGIGACTTT T

SEO ID NO:126: (Length of Sequence = 266 Nucleotides)

CTITIAATGA TGTGGTTCTG GTGGGATTTA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCCTMAACC ACAACCCACA CATTGGGTCA CCATTTCCTC TTCCTCCTCC TTCTTGTGGGT GGCCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT GTAAGGCCCC TTMTCAGTCC TCAGAGTCCA TTCTTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC TCTTAGTTTG CTGTCGCGTC TGTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GICTGGITCT ATTCATTTIG TAGTIGOGAG AAAAGGAATG AACCGIGACT ATGGCAATTC ACCGIGACGT GIGATAATIT
AGITTGCTAT GAGTITTCAC TCTTAGGIAA AACCTAGITA TCCTAATTAA TAATTAGITA TGGATGATAT AGIAATTTIT
TTTTTTTTTTT ACTGCGICTC ACTGTCATTC GGGCTGGAGT ACAGTGGCTG ATCACAGTTC GGTGCAGCCT CGACCTCCCT
GGGCTCAGTG ATTCTCCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT
GGTGTGTTT TTTATAAAGC CAAGGGTTTT GCCCATGWTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC
AGGCAAGTCC TCCCACCTTC GGGCCTTCCC AAAGT

SEO ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCTGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTG GGGGCCTGAT
GGCCCGGCCA GAATACAGAG AGTGGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCCCGTGAAG GCCTCTCGGA
GTCACCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT
GTCCTAGAGC ACCGCCGGG GAACCAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGACC AAAGCGGCTG CAGTGCCCCT
TTGAGCAGGA GCTGCTGAGA CGCCAGCAGA GGCTGAACCA GCTGGAAAAA CCACCAGAGA AGGAAGAGGT TCACGCCCCC
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEO ID NO:129: (Length of Sequence = 186 Nucleotides)

GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACCT TTTCAAAAAA TACACCATTG GCTCTATGTA
GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG
GAAGGAGGAT CATTTRAGCC CAGGAG.

SEO ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGIGAAAA ACCTCTCCAA GGAAAACTAT GAAACACTGC TGAAAGAAAT
CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT
CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATCMT TCTTTACAGG NITCGGAAAA GGAATTCTAA AATTCATATG
GGACCCAAGA CGGGGCCGC ATAGCCCATG GCCGGCTTAG SAAWAAGGGA CAAATCTGGG AGGCCTT

SEO ID NO:131: (Length of Sequence = 184 % sotides)

CCAGGITGGA TGGAGIGCAA TGGCACGATC TCGGCTCACT TACCTCCC AGGITCAAGC AATTATCCTG TCTCAGCCTC
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTITTG TATTITTAGT AGAGACGGGG TITCACCGTG
TTAGCCAGGA TGGTCTCAAT CTCC

SEO ID NO:132: (Length of Sequence = 270 Nucleotides)

GENEGAGGEC GTOGAGGECC AGGAGCIATT CTACACGCCC GAAATGGCTG ACCCCAAGTC AGAACIMITC GMGNAGACAG CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCCGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG GACCTGGGGC CCGGCAAATC CTTCCGNNNC ATTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGACGT GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEO ID NO:133: (Length of Sequence = 529 Nucleotides)

CTIGCAGIAC ATAGCATTGI TATTACIGAT AGCITTATAA ATCIGCCAAA TAACATAGAA TGIAGCCTCA AAAGGATGGI CGAGGGITCG CAATCITTCT TICTCCACCC AGIGGIGIGG AGCAACTCIG TGCCITAAAG AGGCCACCAT GGAAAGAAAC AAAAAGGAAT CTCTTTCAAA ATCCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACTGCA TCIAATTAAG TCCACTCCAC ATTTCTTTCG ACTCTAAGIA TTCTGCACCC GAAGGCTAAA TTGAACTGGC TCAGCCCTAT CTTTTTTGCC ACACTCTTAA TTACAAATCT ATTTCTTCTT CCTTTCATTT ACTTCTTCT TCTTAAGIAA GAAATGTGG AAATGAGACT GGCAGGTTTGG TTTGTTTGCA TGIGGGIGIC CATTAGGCGT CTCATCCTAT GGCCCTTTTT GGAAATGTTG CCTTCCTACT ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTTGCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGIGGC ACCCGIGCAC CGGGGATGIG TCCTGCCACC AGAGGAGGIG TGCGIGGCGG GGAGCAGAGG GGCITTGITT
CCCAAGGIGAA GGIGGGGCTI CITCACTCIT AGAGGIGCAI GIGIGGGIGG GGGIGCTTGC TGITGAGGIT TATGCCTGTA
ACTGACAGCT GTCCCCCAAG CCATGCTGGC AGTGTIGAGG TGICGTGCCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG
TGGTTCAAGT GGGGCCCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCCTTCAGCA TCTCCTGGGT TTTGGCAGCA
GGAGGGGTCC CCTTGTGCAA TTCAGGGGGC
CCTTGTTTGC TCCCCTTTCT TGCAAGAGGG GTAGACG

SEO ID NO:135: (Length of Sequence = 534 Nucleotides)

The state of the s

GGCATTGITC TOGTGGGTGT GTCACGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCTT GTGAAGGAGT
CITACCTAAA ACAAAAGAAA TATCAGGGAC TITTGITGAC TATTTACAAC TCAGITTTAC ATTTAAATTC AGGCAGTGTT
AATATGCCAA GGTAGGGAAT GTGCCTTTTT CAGAGTTGGC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

WO 93/16178 PCT/US93/01294

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TAAGGCCTCA CTCCCGGCTG TGAAGGTCTC TGATCACACA GAAGCAGCCC TGCCCAGCCT GGGTCATTTG CTGTCCGCTT
TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TCCAGATAAA
CCCACCTAAG TGAAATGGGC CATCCTCTAA ACTGGGGTAC CTCACTGCAC ACGTTCTAGG TAGGCTTTCC ACTTAATCTA
ACTTGAGGCC TACAGGTACC CTGTAAAAGTT AGTGGGGCTT GTCCTTGATT GTGG

SEO ID NO:136: (Length of Sequence =279 Nucleotides)

CAGTITIGAC AAAGIAGCAT AGIGACITIN TITCCIACANT GACTITICEGA GAAGIINGCA GITTCIGGCA AAGIGACGCT
GGGCIGITIG AAAAAAGGCAA GCITAGCCTA GGCIGCCATC TIAAAACATT TOGAGGCIGT AGCITCCTCA GGATCCITIG
CCIGIGGICT GGIGGCCGGC AGIGCCCCCGT CIAACAGCTT TIAACTCIGC ACITAGIGCC TGAGCACCTA TGGCIGIGAG
AGAIGCTAGA TACAGAACCC TGICCIGIAC CACGIGGGG

SEO ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAATATTIA ATGGAGATCI TCCTIGITIGG TCTGITATAT GICTATCCGT TTCIGGGIGG TITAGGAGAA TCTGIACIAT
TTCAGCATGI CCTCCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGITGIC CATITAAAAG GITTGGATTG CACITTCCIT
TCCTAACAA TATGCGAGTG GCCTCAACTI TTCCATACCA GCATGCATAA TGAATGGGIG CCCAGTGGIC ACTATCTAAC
TGGITGACTG AAAATCITTC ACTGAGAAGA CGGCTTAGTA ATTCIGAATC TCCTTCACAG GCGCTTCGGI GGAGAGGAAA
ATCATCTACC CACTGICGIT CCTTGICTTC TGTGACACTG CTCATGCTTC TCTGCCAGTI TTTCCTGTTT AGGGTATTTG
GATTTTTGAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATTACCC ACTTATCTAC CCGATTTGTA TACTGAGGAT
CCTATCCAAC AAAGGGTGTA AATCCAGGAT CCGCCTTC

SEO ID NO:138: (Length of Sequence = 266 Nucleotides)

GATIGCAGGC ATGANCCACT GOGCCCAGTC GAGIGGIAAT AIGTIMAAAG GAAACCTITT TCTGAGCAGG TCTCAAAAGA
GAGGITAAAA TACTGAGIAG ACCAIMCTGI AAACAGATGI MCTGITATYC GGGCTTCAT ATTCCATTIA TAAAGCACAG
GCAGAGCTCA GAGIAGATTT AAYGIAACTC TGAAGGGCAC TAGGATTTTC AGAATGGIAA ATAAGCATTG GCTTCACCTT
AAATYCAAAT CTGCATTGGG CTTGTA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTOGOTORA COCCOTOGAC CACOGACAGG CAGAGCAAAG GATGCOGGAG TIGOCTOTOC TGCCCATCTA AGGGGACGTA
GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCCCCAACGG AACAGGAGTC CTTCAACTAT
TGCCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG
GAAGGTTGGA AGGGGTAGGG TCCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA
GAGTAGAAGC CCTGGGCCTT G

SEO ID NO:140: (Length of Sequence = 234 Mucleotides)

GIGAAGGGAG TIGCAGAATC AAATTGCTAC ATAGGCCAAA CAAAAAAGAA GGCTTTTTCA AAAAACATTA AATTCACATG CAGICTCAGA GACTATTTAG GCAAAGTTCA AGITAGGAGC TITTAGGATG TGGGANTAAA ACITTAATKG GAGGGGAGGG CTTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCCT

SEO ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGI TAGCAACTGC AGGAAAACTI TCHTCATTIT CACTGAATTI TAAAGAGAGA ATCCTGTCTC TATTTCTCAG AGAAACTTAG GIGAAAAGTA AAAGAGAGGC AAAATCTCTI TCCTTCATGA GATACTTTTA TTTTTATCTC TTTCTCTACT CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC TCACTCACTC TGGGCCTGCG CACTGGGGTT GTGG

SEO ID NO:142: (Length of Sequence = 373 Nucleotides)

GITTITECAA CACITITITI TIAAGITATI GGGIGCAAAA TCCCAAACCA GGATAIGIGI ATGICIGIGI GITTATGITI
TINATTIGAC CCICCCCTCI TICAACCIAC CCCCITITAT ATCIAATGIA GAAAAAGCGA AATIGAATCI GGAAAGCAAA
CIGITGIATA TAGTIGCGGI AACAATCATG AAGAGAGAGC CGGCTGICC AGTIGITITIT GAGACAGAGI CICACTCTGI
TGCCCAGGCI GGAGIGCAGI AGCATGATCI TGGCTCACIG CAACCTCCCC CTCCCTGGGI TIAGGCGATI CTCCTGCCTC
AGCCCTCCCA AAGIAGCTGG GATTACAGAC CCGTACCACC ACAACTGGGC TAA

SEO ID NO:143: (Length of Sequence = 262 Nucleotides)

COCCACTOG GCCAGAGGCG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CCGCCTCTCC AGTCCCTTTT TTAATTACCA
CTCCAMCTGC TGGGAACGGG CGAGAAGGAG GAGGAGGCAG GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT
TGTTACACAG GTGACTACAC TT

SEO ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAAGCGG GACCCAAACA GIGGIGCIGG GGAAATTIIT CCCIGICCCC TITGGAAGGC IGAGIGGGIG AIGCAGCACA
GGAACAAGGC TIGGACGICA GAGGICICAT CITCACIGIN ACAAAGCAIA AAGGACIIGG GGIIGAGCGI GIGINIGGGC
TCAAGIGACC AIGCAAGICC TGCCACCICC TICCIAAGAC CCCATCCIIC TCCCAAGICC TCCACAAGAG CIACCIICIIT
CAAAACAATA ACAGAAACAC AICAAGCTIG GGCGICACIG AATICAAGIIT CIGATITCIC CCGICACCCC AGCAACAGIG
CCCAGIITIGA TIGIGACACI TIGACCCAGC ACTIGGIITIT GAAIGITCIIT TICGGCTIGI ACCG

SEO ID NO:145: (Length of Sequence = 324 Nucleotides)

SEO ID NO:146: (Length of Sequence = 355 Nucleotides)

TITIGOCTICI TOCTTOCTTA TOCAAGCAAG GETETGGTGA CAATGACCTG ATCGGGGTTT AACGCCGGCT CTGTCTGCTC
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAACTGCGG TITCATAGCT GGGTCTTCAG
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCCCGCCTCC CACCACCCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA
GGTGTTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEO ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGITITCIG AGITCCCGIG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCCTGTTT CTGGCCTCTT CTCCCTTCAC TCCCGTCCAG TCTGGTTTTG AGAGCAGGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA GAGATACCTG CTGCTTCCAT TGCTTTCCC TTCCTGGAGT CGATGCCTTT CTAAGGGTTG GAGCTGCTCC TTGCAGGGGC GGGTCAGTTT CCCAGGCCAT GCCGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGIGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCCC AACCCCCATC GTCACTCIGC
TGCAACACGA CACAAAGGIT TAAAGATCTG GGCCCAAAGA CICTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGITTC
CCCACCCCCC ACCAGGCCTG TITGTCCCAG GITGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA
GGAAGATCTT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEO ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTT GTTTCAACA AACTITACTA AATAACCCTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACCGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA
TGATCCCACA CATTTGCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAACTGTT TATTTGTAAT
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG
GACCAGCAAG GAAAAATACA TCCCCATCCT CAAAAGAATT TTAAGGTG

SEO ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTTGCGG ATTTGCCTAA ATTATACAGA
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC
TGTCTTGCTG TTGTCCTCAG CTAAGAAAGC CTACCCCTGA GTTACCCTCT TCCATCTTAG AGCCTTCCTG CTCGCTGTCT
GCCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTCACCCA GCCCAGCCTC TGCCCGTTTT CCTTCTCCTT TCCACTGCGG
CTGAGGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCTC CTCTCTCCTC CATAGGIGGG GGTTGTGGGC CTTCTTTTTT TTTTTGTCTT GGAGGGCAGT

TAAACTTCTC CATTTGCCTC TCTCTTCACA CCCAAATGCC AAAGGACACT TTTCCTTTCT TTTTGTGGGTA GTTGCAAAAA

AAAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACTTT GTAACTTAAA GGCAAAGTAG TATGTCACTG TTTCTTTTCC

CTGTAGTTTA CTTTTGAGGT TAAACATCTT TCCATGTCTT TATTGGTCAA ATACAGTTCC TYCTTTTGTA CAATGTTAAT

CCTAATATGG ACCATTTTC CTAATGGGAT TACCGATTTT TTTAAA

SEO ID NO:152: (Length of Sequence = 269 Nucleotides)

GITATTCTGG CAAGTGCTTT CAGGGCCCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGG GTTCAGGTGC TGAATTTAGG GACCCCAGCA TCTCACAGGT TTCCCCTTCC ATCTTTCCCA GTGGCACTGT GTCTGAGCAG GTGTGCCCAG GTGAGGTTGT ATCCACTGTG TCTGAGCAGG TGTGCCCAGG TGAGGTTGTA TCCACTGTGT GTGAGCAGGT GTGGCTGTTG CAGGTGGAAG TGGGGATATN TGGGCACCTG GGTGCCATT

SEO ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTGTAA TGGGGTCCGC GCAAAAGGAA GGGGTGGAGG GTGGGGTACA TGCAGGGGAC ACAGGAACAN GATCCACATG GCCAGGGNCA CAACTTCTTC TGTCGTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA NEAGCTGGGG TGGAAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCCNAAC CCCANGANGC ACCTATAGGC CCTGGACCCA TGGGTCACCC TGGGCCCTAG

SEO ID NO:154: (Length of Sequence = 405 Nucleotides)

TEGRACTICT GACTIGGEGAC CCATGATGTA TEGGICTICAC CTGACTIGAG GIGAATITIG GAGTIGAAGGG CCCTGAGGTC
AGCTCCCAGG TCGGTCGTGC TEGGCCAGGC CTGGTTTTCA CAGGGGCTGA AGGATCCCAG TCCACCTGTG TECATGTCAG
GGCTCGGCCG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC
ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT
AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCTGTNTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA
CCAGT

SEO ID NO:155: (Length of Sequence =: 40 Nucleotides)

CCATGATCIT ATTIATIACA TCTAGITTIT CITIATACCT CIAAAAAAAA GIGCCITITA GATTIACAGC TTGIGCTTCT
AAAGCAAAGG TTAAAACATC ATGCCCCAAA GGAAACAAG GIAAAAAGGA AGCIGCCATA TAAGCICTTA AAANITGIAT
GITACAAGGT TCTAAAATCT CITCAGCACT GGITGGITGG TAGATTGIAC GACACTGACA TGGIGCTTGG GAGGGICATT
TATCIGATGG TTGGAGCAGC ACCATGGGAA AGCIGCCCAG ATGGICTACT GAAGTCCTTG GCTGIGCACA GAATGGGCCC
AAGGGCCAGN AATTCATGAG TCCGGGGAAC TITGGRGGIC CITACTCAAT CTCCTTAGIG CTAAAGNITC AGAGTCTCAA

SEO ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCCTCTGGA TTGCTTCGTT GGTTGCGAAC TTTAAGAATG GCAAACTGTG ATTGCNTCCG ATTAAGACAA GCTTTGTAGT
TTTCTTCGTG TAAACACCAA ATCCCGCCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCCC CTTGAAGCCA
GAGTGTCGCC CATGGTAGCC ATCGTCCTGG ACTCGACGTC CATGTTGTTG TTCAAGTTTG ACAAGACCAT GGCGAGGTGC
GGCCTCCAAT CTCCCCATTT CTCGTCTCCA CAGCACGTGG ACGCGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT
CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGGTCATGA CTCGGGCGTG TGTCCGGCTG TTCCATCTTA
CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEO ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAAGG GTITTAAACG GAGICGGAAC CIGAGTAGAT TICCAAATTI TACAGCCAGG ACTACAGAAG TGCATCATTC
TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CITTGCTTAT TIGAAAGTAA TICAGCAACA GGTCACTTTG
GGATATAACC TGAACCTTT TITTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGGCT GGACATGCAG ATGCTTAGGG
GATTAGCGTT TITCATAATT TGTTCTGTTT GTCAGTTCAT TCCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT
TTARGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGGAATA TAAAGCTATT TTA

SEO ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGGCASGTA AGTGGGTSTC CAGGGGAGTG GACAAGCAAT TCTCCTGTCA TTTGCAACTT
TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCCTGTAGA GGGATTTCAT CTGTACCATC ACACATGGAA
GAGGAGTTTC TAGGTCAGGA AAGGCAGCTN CTAAGCTAAA GGTTTCTTGG TCCCTTNGTC CTGGCATGCC TTAAGGAGGG
G

SEO ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCAGTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG GTGGATCACG CCTATAATCC CAACACTTTG GGAGGCCGAG GCGGCCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

GGAGGCIGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCTGT CTGTACTAAA
GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCCAGCTA CTTGGGAACT CGGGAGGCTG AGGCAGGAGA
ATGACCTGAA CCCGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCCCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC
TGTCTCCAAA AAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTTTTG ATCTTTCCTT
TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAAC ATCCCTTTCA ACTGCTG

SEO ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGCCC CGGGCGAGGA GCCGCCAGGG GCGAGGAGG GGCGCGGGT GGCGACCAC AGGAGGCCAA GCCCCAGGAG GCCGCTGTCG CGCCAGAGAA GCCGCCCCC AGCGACGAGA CCAAGGCCCC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA GGCCGAGGAG GCCGTGGCCA GCTCCGCGCT GCTAGGCCCC CTTCGCGCGG GCCCGGGGG CCCCCGGAGC AAGGAGGCAG CCCCCGCGGA GGAGCCCGCG GNCGCCGCAG ACT

<u>SEQ_ID_NO:162:</u> (Length of Sequence = 286 Nucleotides)

TTITIGGICAA ATAAATCAGA GTACIACAAT CATCAAACAT CIGATTCATT TAACATGIGA GCATCIATAC CIGCCCATTT
GIGIGAATAT TCAGIATATA TCICATACCI ATTCTCATGC CITCATTIAT TGIGGITATG GCTGIAGATA TGGAAAAAAC
AGIAGCIGAG ACATTITIAT TATGAACTAT ATTATACCTT AATCAATCAG TCAGAAAATG CITAGGAAGA AGAAATGCAT
GATTGIAAAT GCATGATTC AACATGCTAC CCGCCCAACA AAGITG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TECCCAAGGA AGACAGAACA TEGAGAACCG TCAAGGCAGG AACCCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC
TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCCGAG GCAGAAGTTG CCTGGTCCTC TGTCCCCACA GTGACCTGAC
TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTGACTG CCTTTGGGAG
CCCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCCTGGG AGACCCCTTT TTTTCCCCCA RGTTCCCCAG AGGGCAACGC
CATCAGTAGC AGTGTGGTGT TT

<u>SEQ ID NO:164:</u> (Length of Sequence = 392 Nucleotides)

ATTACCOGGG CCCCGCCTCC CTAAAACAGA TCTACGGACC TTAACCGACG CCATGCTGAG GCTCATTCCA TCCCTGCRGA
CGTATGCAGA GCCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA
CTATATCTAT TCACCCCGTG AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCTG
TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT
TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEO ID NO:165: (Length of Sequence = 406 Nucleotides)

GITATAATTA TCTTGTTTA TTATTTATTG TITATCTCTT ACTGTGTATA ATGTAGAAAT TAAACTTTAC CATAGGTATA
TACATATTGG AAAAAGCATC TTATATACAG GGTTTGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CITGGAACAT
ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG
GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTTCCCATG TGATTTGATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG
AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCCT GGTAATTCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG
GCCTTG

<u>SEO ID NO:166:</u> (Length of Sequence = 453 Nucleotides)

GAAAACTTIG CCATGGGICA GITTTATIGG AAGTICATIT TCCIGAATGI TTGGAAGAAA GICTAGIGAC TCAGGATAGC
ATTICTAATI TCACAGAGIT ATTITICCGI TATGAAACAC AGATIGCCIT TGAGGICICC TGITTCTACT ACIGCCCCIC
ACTITTATGI GGGCCICCIC TITCCTITGI TICTGGAGAA CCITTICCIG TICAATICIG TITTAATTIT CAGCAGITIT
TITTCIGIGI GAGIGAGGCI GITTCCTAGC AGGGAGGICI GGITGGICAT TITCAAGIIC ATCAGGGCIT CATCAGGGCI
TGICCACTIC AACCCTTACG CIATAGGNCC CINTGCACCA TCIGCANICT TCAAAATGIG CCCACTGGIT CGITCCCATG
GANGGCTIGI TGGTAATTIG GGCTITTAGG GGGGGCCATG GAAGGAGCAA ATC

SEO ID NO:167: (Length of Sequence = 285 Nucleotides)

TITIACTICITA AAACTIGITAC AACAGAATCA TEGACTGACA CAGGIAATEG CIGAGCCATA AGCAAATCGA GAAGIACAGA
AATGICCCAC CCCAAACAGC TECGGAGIAC ACATCACACA GGGCCTCTGG TCCCGGCCTT CTCAGGIGCT CTGGAGIGGA
GGATCCTTTG AGGGAACTCT GACCACTCCT GITGICTACC TAGAGAGCAC GCCACTIGGG CCACCTACCC CCAACCTTTG
GCCAAAGGAG TGAAAGGAC TGGAACCTGT CGTCAACCTC AGCAT

SEO ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG
GGACGGTGGA AAGGNTCCAA AGACGAAGCT GINGTTTATC CTTGTTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG
GTTTAATAAG CTTTTCCTAA AACATTTTCC CCCTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT
TACCAGCTGC GNCTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG
TTTTCAG

SEO ID NO:169: (Length of Sequence = 346 Nucleotides)

GETIGETATES AGAGECEGEC GICCICCAGG GETIGAGETEG GEAGGETTET GEGETITETG AGTECEGEGE ATGGEGECAG
TICCCCAGCA AACCCCTCC AGAGETGECC CEGGATGEAC AGACAAGGAG GEGETTTGG AGTGACTTGA GECTIGACG
GERTICGCCCT CEGTIGAGGC AAGTGAGTCC TETTGTGGCCA AGAGGATCAGA GICGTCCCTG AGGCTGAGTC GAACACAGAC
CEGTIGGCCCT CATAAAATTA AACATAAAAG CACAAAAAATG GECGCAACCA GACAGCATTG GETITCAGAC AGGCAGGAC
ACGGGGGCCCC CTTCGTGTTG ACCTGT

SEO ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA
GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCCAAA TCCTCCCCTT GGGGGCTGGA GGTCTCTAG TTAATTGGCA
TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTTTGGCAA GGATGGAGTG TCCAGACCTA TGATCCTCTA AGAACTTTAC
CTTTTAAAAA CAGCCACCCA AATGGTGGTG GCGTGGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC
ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEO ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCAGTG GCGCAATCTC GGTTCACTGC AACCTCTGCC TTCCAGGTTC
AAGTGATTCT CCTGCCTCAG CCTCCCAAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT
CAGCAGAGAC GGGGTTTCAC CATGTTGGCC AGACTGGTCT CGAACTTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC
AAAAGTGCTG GGATTATAGG TGTGAGCCAC TGCGCCTGGC CCTTGGGTAA ACACTTCAAA TGCAMCCAAC CATTAAAGGT

SEO ID NO:172: (Length of Sequence = 293 Nucleotides)

GAAACTTATA GTCTTGCCTC CCAACCTTCT GAACACTCCA GTAGAAAAAT CTTCTCGCCT ACCTTTATCA CCCCACGACC
TACTAGCATT TCTTACTCTC AAAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT
GACARAACTT TTAAATTTTA TCCCCCTCTC TGAGAGKTCT GCTAGGACTC CTTCAGATAA GTGAAAAAGA AAKTTTTTAA
AATTTATTCT CAAATCCGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEO ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GITCCTCAGG AAAAGGATGG ACCITCTCT CITCTCAGAT GGTCCCTTCC ATTCCCCTGA AACCTGCATG
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCCAGCT CACCTCCATC TATGCATCTC
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCCTCCA GCAAGCCCTG
CTAGCCACAT GAGGAACAAG TTTCCGTGTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCTCCC TGCCTCCTGC
CCAAGTGGCT CCCCCTGTAT TATGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTTGTAGGGC TCCAGGAGGA GGGCCGAGAA
GGTGTTGACC TTGTCTGCCC CCCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTTCTTC ATACAGGTCC
TCCAATCTGG TCCAGATACT TGGCCTGGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TIGIGIACAT AATCICTAAT ATTIATATAT ATTGATATAG AATTCTCTCT ATAATATATG TCATAGAATC
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG
GAGGATGGTG TGTGGGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCTC TTCAACACAA
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTTAATAAAG
TCAATTGAAA AATGAAAGTG CACCCCCCCT CCAAAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGCGACGG ATCGATAAGC TTGATATCGA ATTCCTTGAT NITTTCTAGT GFTATGGITT
TCTCCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTTCCATCTA TAAAATCATG TGCTAAATAA TTAACTATCA
TCTCTATCAT TGTCAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTTGGGCTTT AGAGGTCAAG
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCCT G

SEO ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTITATIC AAACACAGGC AAGAACAATG ACCITCAGAG CIGGGIAAAA ATAATAAGIT AAAAGCATGG TIAGAATITT
AGACCAATCAG ATAAAAAGIT TGAAGGAAGI GATTITCCCCT TCCTCTCCTA ATTGATTAAT TCAACACAGC ATAAAAATAA
TTIGIATCTA TAAAATATCC TIGITCCCAC ACAAATGAAC TGGAGGIGGC CCTAGGATTT CCTTGACTAT GCACAATGCA
CACAATCIAC ATGTCCCTCC TCCCCAACIT TIAAGGCAAA AATGGTCCTG CATCTTCAGG CAGAGGGIGG GCTCATGCCA
GCAGICAGCT GTGGTCAAGG ACACTGGGGG TGCGTTTYCT CCACCGAAAG ATGCCTGCTT TGGGTCCACT TTGGGCGCGG
GATCCCATTT TATTTTCTAG CCTGTGCCTC ACCACAGGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

TEGEGGACCA GCATTECTOC CAGCTGAGGG CGCCGTCTTC CTCACCACGT ACCGGGTCAT CTTCACGGGG ATGCCCACGG
ACCCCTGGT TEGGGAGCAG GTGGTGGTCC GCTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG
ACCCCTGTGG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAAATGG CCTTTGACGA
GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCCGNTAC CCGCCGGACA ATCATGGCCA
ACTTT

SEO ID NO:180: (Length of Sequence = 213 Nucleotides)

GASCATECCC COGGAGTCCC CAAGATCCTG GTGGGGAACC GCCTGCACCT GGCGTTCAAG CGGCAGGTGC CCACGGAGCA GGCCCAGGCC TACGCCGAGC GCCTGGNCGT GACCTTTTTT TAGGTCAGCC CTCTTTGCAA TTTCAACATC ACAGAGTCGT TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGCATGGGAT GGACCGGCTC TTG

SEO ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCITIATICA CATIATACAC AAACATAGAA AACAGIGITIT CAGAAGAGAA GCAAAGGCCA TIGGCITCAA ATATITATIGC
AACAATGAAA ATGITCTCAG CCCTTAAATG AGCACTTGTG ACTIGTCCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC
AACACTAGAG CATGTATCTC AGTCTGTTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEO ID NO:182: (Length of Sequence = 451 Nucleotides)

GICTIACICI GITACCCAGG CIGGAATGCA GIGGIGIGAT CATAGCTCAT TGCAACCTCT GCCCTCTAGG CICAAGTGAT CCICCCACCT CAGCCTCCG AGIAGCTGGG ACTACACGTA CATGCCACCA TGCCCAGCTA ATTITIGIAT TITTGGTAGA GACGGGGITT TGCCATGITG ACTAGGCCGG TCTTGAACTC GIGAGCTCAA GIGATCTGCC TGCCTCGGCC TCCCAAAGTG CTGGGAATTAC AAGCGTGAGT CATGGTGCCT GGCCTAGTIT GCTCTTATTT TTTTTCCATC TTTGCAGTTT CTAGGCCACT GGGAACAGGC TGCAGAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTTGC ACCATCAAAA AATAAGGTGA CGAGAGTCCT GGGTTTCCCA GTGTCACGC AAGAGGGGTT ACTGCTCACG GGTACACACA G

SEO ID NO:183: (Length of Sequence = 444 Nucleotides)

CCATGARAC COGCOGACC ACCACAGA AGAGGAGTT COTGAAAACT CTGAAGGATG ACCGGAATGG AGACTICTCA
GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAAG GAAAATGGGG AGGAAGGCTG
TCATCAAAAAT GGTCTTGCCC TCCCTGTAGT GGAAGAAGGG GAGGTTCTCT CACACTCTCT AGAAGCAGAG CACAGGTTAT
TGAAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTGCCTT CCCCTCACAG AGGATGAGCT CAAAGAGTTC
CACATGAAGA CAGAGCAGCT GAGAAGAAAT GGCTTTGGGA AGAATGCCTT CTTGCAGAGC CGCAGTTCCA GTCTGTTCTC
CCCTTGGAGA GCACTTGCAA GCAGAGTTTG AGGCTCAGCA CCGA

SEO ID NO:184: (Length of Sequence = 399 Nucleotides)

GECAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTGTCCCC TTTACTTCCT GCTATCTTCT TCTCCTCTTC TTCTCTCTCT TGCCINTATG CCTGTATTTC TGGCAATATG ACAGGCCTGC CTACCCAAGA TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTCGGGAG GGTCTTAGCA GCCCTGGGTG GCTGCCTGTG CTCAGGTCCT CAGCTCCATG GGAAATAAAA ATGGCACCCT GAATCTCTAG GATTTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCCTC TTGTCCCCCC GTTTGCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAGTA TTTTATTAG

SEO ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC TCTCAGGGAG GGCAAGGCAC AGATACCCCA AATTCCACCC CACGTCCCAA AGGTCTCCCA GCGGGGCTGT CCAGTCCCATG WO 93/16178 PCT/US93/01294

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGA GAACTAAGGG AAGGAGGCAA ACGCCAGGGC CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GITCCAATAG CIGGITTIAT TCTCAGCACA AAAGGGCCCT GIGIAAAAAC CAGAAGGATT TIGIAAAATA TCAAAATGAA
TATITGGCCT GGAGGITGGA AAGIGAAGCA AGGCIGGACA TAGAAAAAAA CIGATCAGTA GITATTCAGG ATATTATITTA
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CIACAGGITC TTATCTGGGT CAATGAAGAA ATTGTGTTTA
TCTTGCTGCC CTTGCATCAG GITTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCCTA
GCTTTTACAT CTTGCCCTTG CAA

SEO ID NO:187: (Length of Sequence = 229 Nucleotides)

GGIGOGGCTC CACCCCTTCC ACGICATCOG CATCAACAAG ATGITGTCCT GIGCIGGGGC TGACAGGCIN CAAACAGGCA TGCGAGGIGC CTTTGGAAAG CCCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CCGCACCAAG CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGGG CCAAGTTCAA GTTTCCTGGC CGCCAGAAG

SEO ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTOGGACTC CTGCGACCGC ATCAAAGACG AATTTCAGCT ACTGCAAGCT CAGTACCACA
GCCTCAAGCT CGAWTGINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CKTCACTATK TGATGTACTA CGAGAKGTCC
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAAGGCT GACGGGATTT GTGCCCAGGT CCTGCCCTAC
CTTTCCCAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCCAT TGAG

SEO ID NO:189: (Length of Sequence = 215 Nucleotides)

GEAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GACGATGGTR CAAACCCAAG ATTATCCTCA
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG
ACGTCACTGA TACAACCGGT CGGGCACATC TCKCGGCCTA TGCTGCCGGT GGTGC

SEO ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATEG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTCGGT TTCCCATCCA AGGGTAAGTT TCCCAAAATA CCG

SEO ID NO:191: (Length of Sequence = 316 Nucleotides)

GIATTIATAC ATTIATTIAT ATATGIATAT TIACTICAGA NGAAACGAAC ATTICGGGGA CAGGAAGCAA GCAGGCCCGG
GGCTGCTTCC CTCACTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT
AACTGGGAAG TAGGGKGCGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGGTTTG CACTGGGAGG
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GIGGITTITG GITATATGCA GCITITGACT AGCATGIAIT GIGICITITI CICCICIAIG AATAATITIA TATITCATGC
TACHICITGA AAGITIACIC TITGATGCIC TAAGAGAACA GCCAGATGGI TIATATGAAT AANCIITATC TGCAGGATGGI
TITITGICAAT TACIAGAGAA TICIGIGCAA ACATATCAIC TCITCACATG CIGCACACIT TGCITITTGI TAAACAGCAG
GIAGIAGACA GACCAATACC AGITTCGCGI TAAGG

SEO ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGA CAGGGGAGGT CAGCAAGGAA
CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTC TCTTGGCCTG
GGTTGGCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCCTTTCG TGCCCCC

SEO ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGCC TITGCTITCA TAACATGTAT TITTAAGTAT TTACTCTCTT AATGGCCCTC GIGICTATIT TATACATCAT
ATCICTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT
GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEO ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTIGIATOT TAAATTATOT GGGTTTTCAA ATTIGIGGAG AATAAGIAAT AGTGACATTA GTTTAAGGAC
AGTGTTCAT CAGGCCATTA TTITAATGAA TCTTATATTT AAATGTCTGT TTCAGGAATT CATGTGAATC TTTCTTTTTA
TAGAGGACCC ACAGGCATGA NITATTTACT CCTCCGGTGA TAGGTTCTCA CCCTGATGAA AGCGGAAGCA AATTCCAGGT
TAGAACATTA TNCTAGTTAT GTAGGGGGGT ATAAAGTGTG TAAGTTTAAT ATTT

SEO ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTA AAATAGAAGA CTTTAATGGA AAACATTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAAGCCC CGTCAGTAGT ACACATTTCT CTATGGTCCT TCAACAGTTT TTCATATACA AAATTTTCTG CTATTTTTGC TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEO ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTTCCCCCAG CCCTCAGGCC AGTGCCAGGA CAGCTGGCTG CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTTATGG

SEO ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG CCTCAGGTTC CARAGGCTTC CACCTGATGG CTGCACTT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGITAAATGA TGITGICAGI GCCTATTTAA AAAACTACTC TTCCCCTTCT CTATGAGITC TACTTTCGTA
AATATTAATA TTTAACCAGI TAGIAAAACT AACACCACTA TTTCAATTCT CTTTTGIGCA TAGIAAGTAA ATTTTGCTTT
ACTTACTTTA TAAAAAAATA CTTTACATTT TATAAAGCAG GITTTAGAAA AACGGITTAC AAGAAAGTTT GCCTCCATTT
CACTGCCAAT TTAAGCACAG GGGAAAAT

SEO ID NO: 200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGIT TGIGAAAAGC AACAGGGGTA NGACAGGTIC AAGGAAGGAC ACAGACAGTG CCCTGTTTTA GGTTCCAAAT
TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGI CATTTGGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT
GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

AAAGGIGGIG AAAGCCCIGC TICIGGACAG TCCGGCICCA ATCIGIATAC TGITIGICIG GGATGCIGIA CICAAATACC TGCIGGICCG AATGAGCGAT GACAAGGIIG TTTGGIATIG GGGCCAATAG CCATAGCAGI CACITGGGAA ATTGIAAGCA GGCACCGIGC AGIGAAGIIT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTOCAGGOT GATGAACCOG ACGICCATTI CICCAAGAAA TICCIGAACG TCITCATGAG TGGCCGCCCC CGCTCCTCCA GIGCTGAGIC CITCGGGCIG TICTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGCCCAT ATTCAGGITIT GIGCCTCGAC ACGAAGACGA ACTITGAGCT GGAAGTGGAT GACCCTCTGC TAGTGGAGIC CAGGCCCCCA GACTACTTGT TACGAGGGCT ACAACATGIG CACTGGGTGC CCG

SEO ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCCGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCCACA TCCCCACCGA
GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCTTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC
ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTCACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG
CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCKTT CCCAGCCTCC ACCTCCTGCA
CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGCCCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC
CGTGATGCAA GGTAATTTGC GTGCACCTCC TGGGTT

SEO ID NO:203: (Length of Sequence = 336 Nucleotides)

CIGCATGINI TEGGGACACI TACGCCAAGG CGCCGCGITC TCATTAGGAG CIGGGACCAG AAGIGAATAA GCCAGGITCC
TGICTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTIKTGA AGCTCTGIGC TTCATTITIT
TTGCTTTGCC TCIAGITTTG CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCCTCT ATGIGGAATG TTAACGATAT
TCCCACTGIT TCTGGTGCC TTTCTGTAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC
TCTGGGGCCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT
GCAACACGAC ACAAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC
CCCACCCCCC ACCAGGCCTG TTTGCCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG
GAAGAACTAC GATATCAATG GCCTAAGCCT GCTGTNTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGGC CAATTTAAAG
GACGTGGACC TGGGGGCCC GAGGGGCAC CACAGCCCGAG GGGAGCCACG CCCTGGGCCG GCAGGGCACA TGG

SEO ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAG ATGACCIGAG TGAGCIGCCA COGCIGGAGG ACATGGGACA ACCCCOGGCG GAGGAGGCIG AGCAGCCIGG GGCCCTGGCC CGAGAGTICC TIGCIGCCAT GGAGCCCGAG CCCGCCCCAG CCCCGGCCC AGAAGAGIGG CTGGACATIC TGGGGAACGG GCTGTIGAGG AAGAAGACGC TGGTCCCAGG GCCGCCAGGI TCGAGCCGCC CGGTCAAGGG CCAGGTGGTC ACCGTACATC TNCAGACGIC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCCGGAGCTG GTGTTCACTC TGGGTGACTG TNACGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGINGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

CITTACIGIG GGIGIGGGIG TCACIGICAC TGCCACAGCC ACINGGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG NGAAGGGIGG GGCCATICAG GGITATAAAA CIAACTATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA TGTCTAGGCA CA

SEO ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTIAT TGAATATTGG TTAAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACTT TCAATCACAA CTCAAATATA
AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATTGTATT TTTAA

SEO ID NO: 208: (Length of Sequence = 444 Nucleotides)

GEAGTICTCT TGTCCACGGA GAGCAGTGTT GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAAATCCT AAAAGCACGA
TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAAC
ACAAGTAGAA GGTGGGTGCC ACACTCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT
GTACTTGAGA CCTTCCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEO ID NO: 209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGICAGG AGTICGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC

ATGCAACACA CATGIACACT CTACATGIAC AGCTCACATA TGCATCCATA CACATGTGCA TGCTCACCCA TACACCAGCC

ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAAG TACACACACG TACACCATAT GCATATGTAT GCACTCATAC

ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACACG

GGACATTTCA TACACACG

SEO ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCINAGGA GGCTGAAGAA GGCATCTCTG AGCAACCCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT

CCTTGAGGCA AGCGTAAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA

CAATATGTCA ACTTCCCTTT GGCCTGCAGT TTGTACCAAA TCCTTAATTT TTCCTGAATG AGCAAGCTTC TCTTAAAAGA

TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG

TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEO ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTTGCATAG TTGTCAGCAG

ATAAATATTG AATGACAAAA CTCAGATGGA GGAAAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTTAA TGAGCAAATG

GGAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCACTGGAA TCACACAGGC CTTCCCTCAG CTTGAGGGGC

TGCCTGGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGGG AGAGACTTGC CAAAT

SEO ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCCGATAT GAGGGGGTG GGACTGGGCC CCGGGCTGCC CCCGCGCCT CCCTATGTCA TTCTCGAGGA GGGGGGATC

CGCGCATACT TCACGCTGG TGCTGAGTGT CCCGGCTGGG ATTCTACCAT CGAGTCGGGG TATGGGGAGG CGCCCCCGCC

ACGGAGAGCCC TGGAAGCACT CCCCACTCCT GAGGCCTCGG GGGGAGCCT GGAAATCGAT TTTCAGGTTG TACAGTCGAG

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CAGITITGGI GGAAGAGGG GGCCCIAGAA ACCCIGIAGC GCAATGGGI TGGGCGCCCC AAAGGITAAG TITGAACCCG AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEO ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCRIGGAA TAATCROOG GCTAACACGG ATAACRCAGT ATAAGAACCA CCCAGTIGAT GTCTATTGTG GCTTTTTAAT
AGGAGGAGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGGAATTTCC TGCCCANTGA TGAGAGTATG TTTCAGCACA
GAGACGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT
GTATGGGAAT TTTCTCATAC AGAAGGGCAT CCCTCAAACC GGAAACCACA GAGATGCTAG GT

SEO ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGI GGGCACCCCG CACAGGGCIG CAGGGIGGAA AACGCICGAC GGCCAGGIGG TGACITGGGG GCAGAGAGCCG CAGIGINGIA GGGGAGAGAA GGIGGIGICC CIGCIGCCIG GGAGCCAGCC TGCCIGINCI GIGGGCAGAG CAAGGCACIT TCIGCIGCCG GIGCITCCAG GGCCIAAGCA GCCCIGCAC ACTCACCAGC GCAAGGCICC TCIGCAGGGA ACGAGGCCIG CIACCCATIT CACAGATGAG GGCAAGCAAG GACTIGCCCA GGGITGCCCA NAGCAAGIGC GIAACAGGCC CIGAGAAGAG NGCCAGIGAG CICATCCIGA GITAATTATG GGCT

SEO ID NO:215: (Length of Sequence = 260 Nucleotides)

TEGRITCAAAG TCTAGGCCCT CTTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCCT TGTTCACATC CAGTGGAAGA GTGACAGCCT GCTCCCCTTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGNCTTTC CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGGACAAG ATCTGGGATA ATTCTCTGGA TIACCTGGCA GAGACTITIK TTCTCTTCCC TTACTGTCTC CCAAATAAAC
AGTCTCTCAC TCTGTTGTGA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAATTAAG GGGAGAGAGG
AAAACAAAAC CAACCAACCC CTAANATCAT TINTTTATTG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEO ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTIT INCCCGTGGC TGCTATGGAG TCCCCCAAAC TCCCCAGTGG GGCTTATGAG GGTGGGGCAC TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT MTTCTGCCAG ATGACCAANA TGTTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEO ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGIAGO AGAGACCAAG GOGCAGGGIG CITCAGATGA GCAAGAGAAC CCAGTOGAAC CAGATACCCC AGGIGGGCCG
GAGGGACCCC AGACCITCAG AGGGCTGCCC TGGTGTTCTC CACAGTGCAG TCCCTCTGTA TTCCCAGAGT GGGATCGGGG
CITTCAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC
CAGGACAGCA GGACTTCAGG TCTTTCCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC
ACTTGCCAAG TGATTCACTC TTAGGCCCAG GGGGAACACA ATGACTATCA TTACTGATGC AGACCTGGCT

SEO ID NO:220: (Length of Sequence = 382 Nucleotides)

TTITIGITIT GITTIAATAT TITIGATATT CICTITGCAT TGAAATGGTA TAAATGAATC CATITAAAAA GIGGITAAGG
ATTIGITTAG CIGGIGIGAT AATAATTITI AAAGITGCAC ATIGCCCAAG GCTTTTITIT TGIGTITITA TIGITGITTG
TACATTIGAA AAATATTCIT TGAATAACCT TGCAGTACTA TATTICAATT TCTTTATAAA TTTAAGIGCA TITITAACTCA
TAATTGTACA CIATAATATA AGCCTAAGIT TTTATTCATA AGTTTTATTG ANGITCIGAT CGGCCCCTT CAGAAATCTT
TTTATATTAT CCTTCAAGIT ACTITCITAT TTATATTGTA TGIGCATTIT ATCCATTAAT GT

SEO ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTITGGIT TATITAAAAA ACAAGCCAAA AAAAAAAAAA AAAAACCCCA ACTITATATA CAAAGTCAAA CIGAAACCAC
GGWITATGGA AAGAGGCAAG AWITATGGIT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA
GCCACGGGAA AGAGGIGCTG GITTCTTCTG GCAAGACCGG GGIGACTGGA ACGCAGTGGI CCTACTGGCA AACCCAGCCC
AACACTGAGC TCTTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCTTCC CCCAGGAGGC CTGT

SEO ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCCTTCTCT GCGCCGCAC GTCGCNAGCA GCCTGCTTCG CCCCGTCGTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG
CAGTGGCCGC GGGTGGGAA TCCCGCTTCT CCTCCGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT
TTCGCCGGCG CATCAGCGCT TGCTTCGGAC TGTTTTCCTACA GACCTCGGCT TTCAACTGGA GCGGGGGTTG TCGAAACGAT
GTTAAATAGGC AAGAGCAAAC TG

SEO ID NO:223: (Length of Sequence = 376 Nucleotides)

GIGATGGCIG CCTIGAGGGG GACCATCATG TCGGAGACGC ATTGGIGCAG GICTCACCCC ACAGCCCATG CCCAGCCTCC TGCAGACTCA GGICATCCAG CIGGICGATG GCTCTTIGCA TACCTGGIGC CTTCTCCTCT CGGGCTTGGC AGGCTTCTCT CGGGGCTTCT CAGATGACTC TTTTGCCTTC TCCTCTGTCT TGGCTAACTC CTTGGCCCAGC TCTGAACGTG CCTCCTTGGC TCCCTCTTCT ACCACCTCCT CCCGTTTGGC CAACTTGCTC ACGGCCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT CAGCCCCCTG TTTGATTTTG CTGGGCCTTGA GGTTGGTAAG GCACAGCCCC AAGAAG

SEO ID NO:224: (Length of Sequence = 445 Nucleotides)

GITGATAGAC ATTGGCATTG GGGITGCTTC CACCITITGG CIGICATGAA TAATATTGCT ATGAACACTA ATGTACAATT
CITTGCCTGA ACGTAAATGT TITCATTTCT CITGGGTATT TATCTAGAAA TGAAATTGCT GIATGTTAAC CCTTTGTTTA
ACCICTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGITCCAAT
TTCTCTATAT CCTTGGTAAC ACTTGTTATC TGCCCTTTTG GITAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG
TGGTTTTGAT GIGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAAATATC TGGTAGTCTC
GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

<u>SEQ ID NO:225:</u> (Length of Sequence = 403 Nucleotides)

TECTOTOGGE ACAGITICOC GEGCAGOTOC TEGCCAGOTT CCAGCCCAGA GICCTCAAGT CCAGGGCACC TIGGGCCCAG
CGCAGGCAGA ATCCGAGGIG GICCIGGCIC TACCCTGGGC CICCTACTCC CCAGCACCCC TEGAGGAGGC AGGGGCTCCC
CGCCGCCGAG GCTGCCTGCC CTAGGCCCAC CTCTGCATGC TGCTCATGGG GCCACCCTGC CTCCTGGGCC CTCACTCTGC
CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCCAGGGAG GTGGGCCTCA GGCTGCCCAG GTGCCTGCAC CCCAGCCGGG
CTTCTCTGGG GCCTCCCCGT CGTCAAGCCT ATATCCTGTC TGTCCCCACC CCAGCTGTCC CTTGCCAGGG GACTGGCATA
AAA

SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GIGCCITAAG GAGAGAGAIT GIGITCITCC TCTCTCAGG GIGATAACIC AGGAAGCCIC TGGGITGGGA AGACCATCAG
TTCTTTTGTC TTAGGITTCT TTTCCTGTCC CTCTTCCATC CCCAAGATGI GACCCCATAA AAATTTTTCC TGAGTTGGCC
AGGCATGGIG GCTCACGCCT GIAATCCCAA CACTTTGGGA GGCIGAGGCG GGCGGATCAC GAGGTCAGGA GITCGAGACC
AGCCTGACCA ACATGGIGAA AACCCCATCI CTACTAAGGA TACAAAAATT AGCCGGGIGI GGIGGCACAC ACCAGTAAGT
CCCAGCTGCT CAGGAGGCTG AGGCAGAGAA TTTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG
GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEO ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TICCGGITCG AGGAGCCCGI GGITCIGCCI GACCIGGACG ACCAGACAGN CCACCGGCAG TGGACTCAGC
AGCACCIGGA TGCCGCIGAC CIGCGCATGI YTGCCATGGC CCCCACACCG CCCCAGGGIG AGGITGACGC CGACTGCATG
GACGICAATG TCCGCGGGCC TGAIGGCTIC ACCCCGCTCA TGAITCGCCTC CIGCAGCGGG GGCGGCCTGG AGACGGGCCAA
CAGCGGGGAA GAGGAAGACG CGCCGGCCGI CATCICCCGAC TTCATCIACC AGGGCGCCAC TTGCCACAAC CAGACAGACC
GCAACGGCCGA GACCGCTTG CACCTGGCCG CCGITACITA CGCTCTGATG CCGCAAGGGC TCTTGAGGCC AGCGAAGATG
CCAACATCAG GCAACATGGG CCGAAC

SEO ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT

TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT

CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGNCG

TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

THITTEITCC CAAGCCTITG TGACTGACTI TAAATCCTCT CACCIGCAGA ACAGAGATGG CITCAAAGIG GGGAGTGAGG GAGTGAGCG GAGTGAGCA GAGTGAGCA GAGCCCTGGG CIGAGACCTG TITTICTICC ATTICTGCTG TGGCTTCCCA CAGCTCCCTG GTTCCACACC AGGCCCTGCT CIGCCGCAGA AAATGGATTC CCAGGCCACA GAGCTGTCAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC AGAGGCTGTG CGACAGGGCT AGTCCCTGGT GGGCCGGTCT GGGGCAGGGAG ACTKGGAGAT GGGGAGGGCG TTGAGGAATCC GGGGGGTCCT GGATACTTGA CAAATTGGCT CAGGTCTTAG CTYTGGYTGC CCCACTGATT GTGTTGCTTG GCAAGGTGCA AGTYTTCGGC TGTTC

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCCT CCTGCAGCAG GCCGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA
GCTGCTGCTC AACAACAAGC TGGTGTATGG AAGCCGGCAG GACTTTCTCT GGCGCCTGGC CCGAGGCCTAC AGTGACATGT
GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG
GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG
CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTKCT CTTCAGCCAG GA

SEO ID NO:231: (Length of Sequence = 398 Nucleotides)

G

GAGGCIGGAG AATOGYTTGA ACCCAGGAGG CGGAGGTIGC AGTGAGCCGA GATGGCGCCA TIGCACTCCA GCCTGGGCCA GAGCAAGGTT CCTTCTCAAA AAACTTGGAA ATCTGTTGGG AAGTAGGGGG AGGCAAGGT TAAAACCTAT GCAGGTGTGT CAATTAGACT TGTTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCCAGAA CAAGTCTGGC AGTTTCATAA GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTTACATTA GGGGAATGAG CATGGGATAG GTGCCTCCCA GTTGGTAGGA TAGCATGAGG AGGTTTCAAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEO ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTIAT TITATITICGC TATTITCCAGT TIGAAGCTAC TATCATGGGC GITTAGAGTI ATACAAATGA
CACTIACAAA AAATAAAAGA CCAAGACACC CAGAGTGAGA TGCATGITGG GGACGGGGG GGCTGGCAGC AGGGGGGCC
CGGCGGYTCA CCCCAGGGCT CCCGGAGGGG CGACGCCTGG CTTCATCCAC CCGGGAGGCC CAGGGAGCAC CAATCACAGC
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCCA GG

SEO ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTITACAGT TITATTITIA AATCATITAC ACATATTCAT ACAAAGAAAA ATAAATITCA GGATGGAATC CIGGGGACCA
TGGTAGTITA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT
TAGTGTATCT CCCCATGCAG GGGACAACTG NGAAGAATCC AAGCTGCTCC CTCATCTTCC TTCGATCTAG ATGGGGGAAG
GGGATTTTCC AATGCTCTCC CCTAGAAACA TTTCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTTGCTA
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

SEO ID NO:234: (Length of Sequence = 217 Nucleotides)

GECCAGGAGC CAGAGGGCCC CGGGGCCACC CCTGCCGGGG AACGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC GCGGCCCGCA GACCGGAGGC TCTGTCTGCC CTNCGTGGAC GCCTCGCCAC TCCCAGGGAG GACGGCCTGC CCGTCGCTGC AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTCGA TGGCTACCTG GACAATG

SEO ID NO:235: (Length of Sequence = 221 Nucleotides)

AACTITAAAG TTAGGATTIT AAAATATTIG TAACTGGCTA AATTITAAAG TCGIGACAAA TAATTACTTA GGITCAGAAA TATACACACA CTTACTCTIT AGCCAGTTIC TITCAAGGIN TTACTGTCCC ATCAGATATC TAGCCATTIK CCTTTGCAAA TTACATACCT TCTTAAGAGT GTATTTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC CTGAGCTGGG CAGTTTCACA CAATCANTTT TNCTCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCCAGAAC AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEO ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCITTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTTCTGGGC CATTCGTCTT ACTTTCATTT
TTTGATTACA AATTTCTCTT GACGCACACA ATTATGTCTG CTAATCCTCT TCTTCCTAGA GAGAGAAACT GTGCTCCTTC
AGTGTTGCTG CCATAAAGGG GTTTTGGGAA TCGATTGTAA AAGTCCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG
AACGTGTAAG T

SEO ID NO:238: (Length of Sequence = 327 Nucleotides)

GITCGIGGCI GICACAATAA IGCIGIGATA AIGCIGIGGI ITCCCAGCAG GGAGGIGGGA GCGGGAGGG GGCIGCAGCC IGAIGAGAGC CAGCIGAAGG AAGAGCIGCC ICICCCITCC TAAGCCCCIT CCCAAGGICI GCCCCACCGC CCAAACCAAA GACCACICCG AACAAAGIGA GGAIGIGGAI GCICTICCIG GGICCGCIGI ICCGCAGAGG GAAAGAAAGG GIAGCIGCAC TGACCCCACT GTCCCCATAT ACAAGGGTIK GGGGGCAAGA GCATGTGGCT ACTCCCAGCA AGGGRAAAAT GGGAGGAGCA GTAGAAA

SEO ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGIT TATGGIGCIT TAAACCIATC AAAATAGITG TAAGIAAATG GATTICITGI NCICCCAATA ACAATTCICT GAGCIAGGAT AGAIGICITT CIGGCCATIT TACAGGIGAT GACACIGACA TAGGGACIGA GIGGGIAGCT TAAGINCCAT GGITACCAGG AGCAGGACON ACGITICCIG NCICCCAGIC TCATCCIGIT TTCCACIGAC CAGGITGGIT GCICCCITGG AAAGCAGICC CIGAGAGITG ACTIAGAAGI TCAGGGRAA GAGGI

SEO ID NO:240: (Length of Sequence = 349 Nucleotides)

TITITGCCATG TIGGACAGGC TGATCICAAA CICCTGGCCT CAAATRATCT GCCCAGCTTG GMCICCCAAA GYGCTGGGAT
TACAGATRIG AGCCACTGCA CCCAGCCTGA CATGCCATAG TITCAGCAIT TICTTGGGCA ATGATCCAAG CTGAAGGCTG
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGA AAAAGGAAGG
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GIGCAGOGGI CIGCCTICAT CITITAATGG COGGIGCGGI ACAGTIAGIG GACAGACGGG GGATGGGACA CAGCAGGGGI GAAACAGGGC AGICACAGCC GGGGCCGGGG ATCTGGAAGC GGGGGGGGIC CTCCCCCTGG AAACACCGIN TCTGGAAGGA CACCCTTAGG ATCCCCTGAC CTCARGGIGC CACCCACAG GGCCTGGIGT TCTGGGAAGGC CCGGCTKGAG TGA

SEO ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGIACTA CATTIGGIGG AATACGCATG TACAATICTI CAAAAATAGI AAAGAGCAAA ACAAACAAAA AATAGIAGAA GCACIGGAGA AATACACAAT GGCATAAACT AGITACGGGI GGGAIGICAC AIGGACCATA TCIACACICT GIGGCAACCT TCITACCIGA CICCAAAGGA TCAGATAATC AAACAGGAAA TTATGGIAGG AAATCAGAAA AITGAAGIAT GCATTCATAT CCITAAGCATT TIATTITAGC TCAAAATATA AAAATATICA TCAGTTAGCC AAGCTTTICN GATGAGAGAT CATAGCCTCC TCITIGATAG GGGGTTTCIT GGGTTTCCTT GATTTCATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCCAGAC CTACTGTCCC
GGGGGTGTTA TGGCTGTCCC TCGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CGCAGGGACA TGCACAGCAG CAGCCACAGC
CCCGGGGGACG GGGCAT

SEO ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TICTCGAGAA TOGACGAGGA ACITAAATCI GGACTCAGGG TITCAGIGGG GTCTCCGACT CCCACCACCC CGCCCCTCCG NCTGTCTCGC CGCCAGGNGT GACCTCCACG CGAAGGAATC TTCTTCGGAT GGGIGCACCT TGCCAANAGG TGTGGCACCT GGNGGACIAG GAGGCGCCCTC CANACTAAGG GCGCTCANIG CGGCGTTCTT

<u>:</u>

SEO ID NO:245: (Length of Sequence = 239 Nucleotides)

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TTCATGCTCA TGIAACCTTC TTAATAGTGC CTTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCTC CCTGCCATGT GTGTGTCTCT CTCTACTCCT CTGATTTTCN CCTGCTCTCC TATTCTGCTA CTCTCTCTCC TCTCCTCCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GETTCACCA GCETTAATG TECTCIGATG TTGACCGICC CTCINAGINT TCTGGGGAGG AGGGGGGGG GCGGAGGGTC

AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTCACAGT GGATGCACCC TGCCCCCTCC

CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCCNC AGCCTNTGGG CTGCACCCAC AGGGAATNEA GGGGAGGGGC

•

ACCATTACCA CTGGACCCAC CAAAGACCC

<u>SEQ ID NO:247:</u> (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG CTGGGTTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCCTCCT CAGTCATGGC CAGCGTGTTG GTGACTAGAC CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCGGGGT GGGCTGGGAG CAGCTGCTCA CCACCATTGC CCGCACCATC
AACGAGGTGG AGAACCAGAT CCTCACCGGC GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTCC GGGCGTCCTT
CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGACG
TGGAGANCGA CCGGCAGGGT GAGGNCGAAG TTCAACCGCA T

SEO ID NO:249: (Length of Sequence = 383 Nucleotides)

AGOGCATCCA CACOGGGAG CGGCCCTACC CCTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAAACAGAC ACTCAAGGNC CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGGGATA GTGACCCATC AGGTCAGCCA CCCAACCCAC CAGGTCCCCT CATAACTGGG CTTGAAACTT CTGGCCTGGG TGTCAACACT GAAGGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT CGAGGGGGAG TTTTGTAAAAT CCAAATCTCT GTGGTTTCAT GCTTTGTATA TGCTCACAGC AGGGCACAAT AATCCAAGAG AAGGTCTGG AGCCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

<u>SEQ ID NO:250:</u> (Length of Sequence = 397 Nucleotides)

GIATCCIACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTAACAT
GGGCTGIATA TAAAAATATT AAAGAGAAAC AAAACTGTAC ATTTCCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC
CTTGTTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAACGT GATTAGAGGG TCTGTTGATG AAACACAAAT
GTATGTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT
GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTNCCCGC TGCGGGAATC CTGTTNCTTG GGTGGGA

SEO ID NO:251: (Length of Sequence = 276 Nucleotides)

GECCATARAR GARAGAGCCT GITACCTATC CATARACCCC CARARGGATG AGACGCTAGA GACAGAGARA GCTCAGTACT
ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCCTNCCCG ATTCCGGGCNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT
GGAGAGGNGA GINAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTCAGAR GTCANGACAT GGACCTGCGG CGCACGCTTT
TCTCTARCAT TGTCCTCTCA GGGAGGGNTC TACCCT

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAGCA AGATATTTAA GCCTTATTTC TCTTGGCATG
CTTGGATTCC CCAGTAAAAA AAACTCCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAACT AATATGGATA AGCAAGCTGG
AAATGGAGAA GGCTATTCAC TGTGCCTGGG TCCTACTGTT TTCTGGNTGG GAACTGCTTT TCCATTAGGC CTGGTGTGCC
CTGGAAGGGA MAGCCCTCTT GCAGAGACTA CAATCTTGGA TGGGTCCTTT GCCAAGTTTG AAGGTAGGAA CCCA

SEO ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GETGETGAGG GCAGCTGTTC CTAAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC
TCAGCCTACC CGTAAACTGC CACCCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC
CAAAAACCAA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAAGGA TGCCAGGGAG GCGGGCAGTA GAAGAAAGGA
AACAANCACA AGTGGGTTCC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEO ID NO:254: (Length of Sequence = 413 Nucleotides)

CITTITCITA ATATATAAT ATTIACCAAG GCAAGACAGI GATTIATGGA CATTIAAATT AGITIAGCII TGIICIGCIG
TTCTAAAACA TTGIGIACIG TCIGATAGAC TTITAAAAAA CAGIGCITIT CCAGGAIGAT TIATGATATG CAGIATIGIT
TATAGATGCC CATGGCITAA CCITGAAAAG TCAATTAAGI GACACAATTA AGAGAGATAT GAATAGIGGI AGAAAAAGCA
TGIACICIGG ATAAGIGGGG GIAAATCIAG TATITGITAT TCCTGTCAGI AATATTGICA NIAGIATITI TTAGAAGGIT
TAATTTFITT ATGGGITATA AATTCATGIC ACTCTTCTGC AATGGGTACC ATCAGTGGGA ATGCNGGAAT TATCCATGCT
TTGGGGGTTA AAA

<u>SEO ID NO:255:</u> (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGITTATAT TTGTACCTTC TCTCCTTAAG AGITACAGTG AGTGACTCTA
CTCCTCAAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT
AGGITCATAT TCAACTCTGC TACITAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAAATGGG
TAAATAATAA ATACCCTCCT CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG
GAGCTTAGTC ATTGTTTATT TTCTCCCTCA TACCCATACA TCMTTCATTC CTACTG

SEO ID NO:256: (Length of Sequence = 241 Nucleotides)

GIAGAGATGG GCICACTATK TIGCCCAGGC TGGICCTGAA CICCTGAGGI AGGAGGATCG CITGAGCCIG GGAGACAGAG GITGCAGTGA GCCGAGATCA CGCCACTGCA CICCTGCCIG GGIGACACAG TGAGACTCIG TCTIAAACAA AACAAAACAA AAAAAGGCCA GGCGCAGGGG CTCACACCTG GIAATCCCAG CACTITGGGA GGCCAAGGIG GGIGGATCAC CTGAGGICAG G

SEO ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGIGTC CITCGCCAGA TCACTGITAA TGATTTGCCT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT
TAAGAAAACC AAGAGAGGCC GGGCACGGTG ACTCACGCCT GTAATCCCAG CACTTTGGGA GGCCGAGGTG GCGGATCATG
AGGTCAGGAG ATTGAGACCA TCCTGGCTAA CACAGTGAAA CCCCGTCTCT ACTAAAAAATA CAAAAAAAATT AGCTGGGCAT
GGTGGCACGC GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA
TGAGNCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTCGTAACC CCCCAACCAAC CCNCCAACCC
CCCGCC

SEO ID NO:258: (Length of Sequence = 157 Nucleotides)

SEO ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAAATT CCAATAGCTT CACAGTTTAA
CTGAGGTTTT GGAAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA
AAAGGGCAGT GATCTATAAA CACTCAAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEO ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGI ATACAGIGIA CACTGATCAA ATAAGAGIAA TTAGCATATI TATCACCICA TITCITTIGI GGIGAGAACA
TITAAAATCC TITCITTIG CIATITIGAA ATATACAGIA CATTGCTATI AAGIATAGIC ATCIGGCIGI GCAATAAAAC
ACCAGNACII ACCCCICCIG TCIGIGACIT TGIACCCIGI TCACCACCCC TCCAATCCIC TAGIAACIAC CATTCTACIC
TCIACITCIA TGAGCCIGAC TITITAAAAT TCCACATGIA AGIGAGATTA CATGGIATTA TICICCNGI GGCIGGCITA
TITCACTITA ACATAATGIC CICTAAATT

SEO ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCTGCACA ATGATGTAGC
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGGA GGGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT
GGGGCCACGT CCTTAGAAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG
TAGGTCAGGC AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCCTGTAAT GCCAGCACTT AGGNAGGCCA
AAGTGGGCCG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAAACC TCATCTCTAC TAAAATTCTA
AAATTAGCCA GGCGT

SEO ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGT CIGGCTITAA TGIGIAACTG ACGIGGGTCA CIGAAACTGI TCAGGCTGAT CITGAACTCC TAGGCTCAAG
TGATCCTGCT GCCTTGGCCT CCCAAAGTGC TGGAATTACA GGAATGAGTC ACAGCACCCA GCCGGCTGTG TTTTGTTTTT
TGITTTTTAC CCCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCCAGAGT AACTGGTACT GCAGGCCCAC GGCACCACAC ATGGCTAATT
TTTAAATTTC GTAGAGACGA GGTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEO ID NO:263: (Length of Sequence = 447 Nucleotides)

TGIATCAACT CAGAATITIC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG
GCCTGTTAGC TTGTGGGCTG CCCAATCCAT CCAACCCTTG GCATTGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG
TGTCCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCCAAAGGGA ACACAGGGGC
TCCCTCTTCC ATTCCAGGGG CATCCACATG GACCCGCACA AAGTTCTGAA TGATTTCCTG CATGTCCTCG AACTKGAACA
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGGT AGGTAAG

SEO ID NO:264: (Length of Sequence = 317 Nucleotides)

WO 93/16178 PCT/US93/01294

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TTTTCGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT CCTCCGCATT CCTCCCCGAG TGACTGGTTT GGCCGCCGGC CACTCCATCC CCGAGTGGGA CTGGACCACG GCCCTGGNTG CTGCCACTGA TGTTGGNGCC TGCACCCCAC GTCCCTATGC CCGAGGCGCA ANTCTGCTCT CCCGGGGACC CCAAGNCTGG NGCACACGCG GGGAGGGCG GGCCATGGAG AAGGCACTGC AGGCAGACCC GTGTTGAGGC CGGCCGG

SEO ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGGAAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC
TGGAATGGTT AGAAGTGAGG GAGTTTGCCC CGTTCTGTTT GTAGAGTCTC ATAGTTGGAC TTTCTAGCAT ATATGTGTCC
ATTTCCTTAT GCTGTAAAAG CAAGTCCTGC AACCAAACTC CCATCAGCCC AATCCCTGAT CCCTGATCCC TTCCACCTGC
TCTGCTGATG ACCCCCCAG CTTCACTTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC
CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGACT TTGACGGGTC AATGGAAGAA TGACCCAAAG
AAGGCTTCAA GGCCAGGCCT GCAGTTCTCC ACCACAAAGG CCCTCACTGA TAGCACCCAC TCCCCCACAC TCAGCTTTNG
GGCCTAGGTC TGGGTCACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGGT

SEO ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGITTICA TCATGAGCIC GATCAGATGI CICICGATCI TCAGACIGGI GGIGICCIAT AATGICCIGI GCACGCATIC
TTGAGCITTC CAGGATTICT GICIGITCIC TCIGITTATC TACAGAAGAA ACTITCICCI TGAGITCCIG TICTICGIAG
CGCCTTGAAC TCTCTTTCCI TTCIGGITTA CGATCCTCCI CITTCCATCI ACCCTGTCIG TCTTCTGIGA GGIGCGAGGG
ACTAAGAGAA CGAGATTCIT GAGGICGIAC AACTIGGCIC AAGAGICTGI GTTTTTCAT TININATCAT CICCACTGTT
GTAGGCATCA CTGICCGGAG AATGITCACG CCGGGGCTTT CGGGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTEAAGGIT ACCTCTITGG AGAGAACATG GATCTGAACT TCCTGGGCAG CCGCCCGGTC CAGTITCCCT ACGTCACTCC
TGCCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCAA AGACTCCCTG CGGCTGGTGA GGTACAAAGA
CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCCCG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCCGATGCCC
GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGCC AGGCCAGTAT ACAGCCCCCAA GAGCCCCT

SEO ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGICIAT TCAGGICTIT TGCCCATTIT GAAATAGCAT TGCTTGTICT TITGCTGGAT ATTAACCCCT TGTCAGGIGC
ACAGITIGCA AGITACCTIT TCTCATCCIA TAGGITATCT CCTCACTCTT GATTGTTTCT GITGCTGTGC AGIAGCITIT
AAGITTGGTG TAATACCATT GIGTTTTCTC TGCTGCCCTT TTAAGITTCA CTGGGTCAAA AGITTAAAAAT TTGTGAATTC
CTATATTTTT AGGGCAATTC TCCTGCCACT GITGGAATTA TGCCTCAATC TATGCAGIAG AATATTAGTG TGAAATGCTT
CTGTACCAAT GGAGATGATG CTGGATGGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC
TCTATATCAT GGATCTCCAT TT

<u>SEQ ID NO:270:</u> (Length of Sequence = 376 Nucleotides)

GAAGAAGAC CCAGACCTAG GGGAGTATGA TOCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA
ACCTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT
GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCACGGA GGGCTACCCC TCAGAACCCC TTNGGGGCCT GGAACAGAAG

GOSCOTOCT COCTOSTISTO ATATGISCOC ACGICTISTO TOCTGCTTGA CITTGGGGAT CTCGATGATC CTGGTGCTCC TGTGTGCTTT CCTGATCCCC TGTCCTCCCA GAGATCTTGA CAGAACTGGA GCCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGITCACGIT CCCTTTCTT GICTTCTTT TTCCTATCTT TATCTATACT TCGACTCCTC TCCTTTTTCC TCTCTTGTTC
TTTAGCCTCA CCTTTATGCT TATGACTGIN CCCACTAAGA TTTCCACGIT GATCATCAAT TTTACGACTA TCTCGACTCC
TACTGCGACT GGCACGATTG GTTCGTCTAT CCCTTGAGGG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGGACAC
CAAATGTTTC ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG
TGCAGGAGAG GTATAAGGCT ACTGGA

SEO ID NO:272: (Length of Sequence = 394 Nucleotides)

GTIGITGITG TIGAGICGGA GICICGCACT GIIGCCIGGG CTGGAGIGCA ATGGIGCAAT CICGGCICAC TGIAACCICC GCCCCCAGG TICAAGCCAT TCICTIGCTI CAGCCICCTA GIAGCIGGGA TIACAGGCAC CIGCCAGCAC ACCIGGCIAA TTITITIATAT TITINAGIACA GACAGGGITT CACTATGITG GCCAGGCIGG NCIIGAACIC CIGACCITGT GATCIGCCCA CCICAGCCIN CCAAAGTITT TCAGAATTIT TITAAGGAAAC ACTITITAACC CITAAGGCIT TCITICAAAC TCAGATCCCC TITACACAATT GATCAGACGT GGCAAAGTIT TGCTICAAAG TTITIGGACT GGGTTTCCAC TTTAGGCTTA CIGA

SEO ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCIGIAC CCAGGCIGOG AGAACGIRAG ITTRAGGAGC CGCAGCATGA TGITOGAGCC GGGICITACC AAAGGRATGC TGGAGGIGIT TKTGGCCCCG ACCCACCACC CGCACTGCIC GGCCGATGAC CAGICCACCA AGGSCATCGA CATCCAGAAC GCTTATTTRA ATGGAGTIGG CGATTTCAGC GIGIGGGAGI TCTCIGGAAA TCCTGIGIAT TTCTGCTGIW ATRACTATTT TGCTGCAAAT AATCCCACG

SEO ID NO:274: (Length of Sequence =348 Nucleotides)

TOCCAGITGI COCGATTGIA ACTOAAAGGG TGGAATATCA AGGICGITIT TITCATTCCA TGIGCCCAGI TAATCITGCT
TTCTTTGITT GGCTGGGATA GAGGGGTCAA GITATTAATT TCTTCACACC TACCCTCCTT TTTTTCCCTA TCACTGAAGC
TTTTTAGTGC ATTAGTGGGG AGGAGGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC
GTAGTATCCG GACAGAGCAC GITTGCAGAA GGGGGACTCT TCTTCCAGGT AGCTGAAAGG GGGAAGACCT GACGTACTCT
GGGTTAGGTT AGGACTTGCC CTCGTGGT

SEO ID NO:275: (Length of Sequence = 396 Nucleotides)

GITTGGTGAA TITTGGTCTGT GATAAAATTG GAGITCAAGA AACAAACAGG AAACTACAAG TGCCCCTTCG CCCCCAGGTC
ACCCGAGTGG CAGGGCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCCTGTCG GAATGCTCCT CCTCCACGTC
CCCTCGCTCC TGTGTCCCAG CCACATGCAC CTTCCCTCTA CCTCTGGGAT CCCTGCACCA GGTCTGCCCC TGTCTTCTCA
GGGCTGCTCC TMTTGGNCCA CAGGACCTCA GCTGGAATGT TGCCTCCTCC AAGAGGCCTT CCTGACTATT CAGCTCACAG
TGGCCACCCA GCCACAATCT GCCATGTGCT TTGGGGGGATT GTCTGTTAAC TGGCAACATA CTGGCAGCCC ATAACT

SEO ID NO:276: (Length of Sequence = 381 Nucleotides)

GETETCEGEG AGECTECECA AGGGGGGGAG CCCGGGCAGC CGGGGCAACC CCCGNCCCAG CCGCACCAC CGCCGCCCCA GCAGCAGCAC AAGGAAGAGA TEGCCGCCGA GGCTGGGGAA GCCGTGGCGT CCCCCATGGA CGACGGGTTT NTGAGCCTGG ACTCGCCCTC CTATGTCCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCCCAAT 155

CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCCTGCA GCGTTGATGA AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEO ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACEAC AGGECTIGGG CCCGAGTAAT TCAAGCCCTT CGGAAGTGTC ACCGGCTGCC AGGCCTCCGA TGCAATCCTG
GAGGCGGGAG ATTCGGCCIN AAGACTGGCT CGAGCCGCCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC
CCAGTGCCGT GACGTCCCCC CTTGGTGGGG CCTGCACCCG ACTACT

SEO ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGIAATC CONGCACTIT GGGAGGCTGA GGTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCCAG CTACTCGGGA GGCTGAGGCA GGAGAATGGC GGGAACCCGG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GIGICIGGEC TCAGGGITGG CCAGCTIGCA GAGGAGCAAG CIAGIAGAAA TATIGCAGGG TICCCAAAAC CAGGICAAGC
AAGAIGCCAT GICACCCCIG AGCAIGCCIG TCITCCCAGG GGIGIACCIC TIGGCIGGCA AAGCCAAGGC CAGIGGCNAC
TIGIATAAAT CACAIGGGIA TGITCITGGI TCAGIGATCI TGGAGIGATG AIGGIAACIN AIGAACAGAG AACTITYYAG
AACTIKGGIC CIGICITCCI CCCIGAACCI AGACAAGTIT CACCCCTCCI CCIGIACCCA ACCCCAIT

SEO ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTITACACAG CITICITGAA ATTIAAAATA TATGIGIAAG TATCICATIT ATAIGCATIT CIAGITICIT TATACAACAG
AATAACITCI TITACATCAA ATTICIGAAT TIGACIAAAT TIAGAAATAA TOGAATCICA TCCATTAAAT ATAGICATAG
AAGGAAGGAA ATAIGAAAAT TAGGATITCA GATGITIGAA CATAAAAGAT AATTITAAAC ATTGICAGTA ATCIATITCT
TITITITITC GAGACGGAGI TITGCICIGI CACCCAGGCI GGAGIGCAGI GGCGCGGICI TGGCITACIG CACCCTCTGC
CICCCAGTIC AAGTGGATIC TCCTGCCTCG NCCTCCTGAG TAGCTGGGGG TACAGGGGCA TGCCAACATG CCGGGGCTAA
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CITAAAAAGA AAAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA CTGAGAAGGT GGCATTIGGA GGAGAGGAGG CAGIGAGCTG TGCAGTIGTCC AGGCAGCCAC CCTTCCCAGC GGCCACCATG ACGGIGTCCT CATIGCTITIA ACCATTAGTA ATCATTCATT CATTCATTCA TITATCCGAC GTCAGCTGGA GGNCCTGCCC GNGGGGCATG CGCTTAGATT TNGGAGGCCT TCCGGGATGC TTGCGCTCCA ACXGGGGAAG GCCGACTTGG GCT

SEO ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCITGGCCT CCCAAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCCGAAAAGC
TTTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA
CANATGGCTA TAATNTAAGG GGTTTAGGGT CCTTTTTTTT TTTTCAGGGA TACATTT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGGC TITACTCCTG GTCCCATGGC GTAAAGATGI GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA GOCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCCT GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTGC AGTGAGT

SEO ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GIAAATTGIT ACAAACITAC TITAGAGCAA ATTTAGICAT CCITCAAAAA TITAAATGIA TACITATITC

CTAAGAATTC GITTGGCTCA CACAATTGIG AAAAGATAGA TGIACACCAG TGITCATIAC AACAATTATG CAACAAATCT

ATTATGIGCC AGACATTATT CGGAACTCIG GGAATACATA AGIGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA

GGGGTCAGGA GAAGCCAAAA AACACCCING AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT

GGNGATGIGA AATCTTGIGT

SEO ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGIGGGIT CGACCTCCGG TTCCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCCT ACTITGAAAA

CGACTGCTGG GTCAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAAACT

TCATCACCAT TAAAGATGCC TTGAAAAAAGC ACTCAGCACG GCAGTTGCGG CTGGCCTTCC TCATGCACTC GTGGAAGGAC

ACCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA

AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTTAAT TAGAGATTAA

AATTGAGGAA TTGAATAATT GAGGTTGCTA ATGAATTTGA AAACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT

TAGCTTTTCT TTCTCTAACC CTTTTCTCAT TTCCTACTAT TATCACATNT CTGGCCTTGA CTGCTGAGTT TATTACTACC

CATAACCCTG GCCTAAGTGG AAACAAAAAA GCTGTAGCCT CTTTGCTGAG CTCCTGGAGA CATTTGGTCT ATTGGATTTA

TGACATGTTC AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCACG CTTTTCTGT

SEO ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCAGT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTTCTGTA TTTACATACA AAGTCAGATC

AGTTATCGGA CAATAGTATT GAATAGATTT CAGCTTTATC CTGGAGTAAC TGGCATGTGA GCAAACTGTG TTGGCGTGGG

GGTGGAGGGG TGAGGTGGC GCTAAGCTTT TTTTAAGATT TTNCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA

GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGGCCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA

AAGCCCATTG CCTTGATTCT CTTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC

AAAATGACGT ATTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG

TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT

GTTCAAATTC TGTTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAAGTTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTITATING GIAAAACTCA GAAACTAACA ATTCACATCC TCCCACCITC TTCTTCCGA AGAAGGCAGT

TTGCAGAGAC AAAAGGGCTG TGGCGTGGGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG

TCAGGCCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

SEO ID NO:290: (Length of Sequence = 353 Nucleotides)

GGITITCATC TICGGITTAC AAAAGICCIA CIATITATIT ATTITAACIT TAATITAAAT ATCACCTACC TIAGGIAGAA
GITITCCITI GIGIAATATA ATATAAAACC GACATITCIT GGGGGCATAA TAGIAAAGAT GITAACATIT TITGGITCIT
TITGGATGCI GIATITGIGC TICTICIGAA AGIGATGIGI GCCAAGATGG CICATGIAAC CCAGITITGA CIAGGCTATT
GATATTCIGI CIGGITAATT TATIGAACIG GCTTAAAGCT ATACATATIT CCTTTIAGNIGIAA GATATTCIAG
ATATATTGGI CIACIGATIC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCCTCGTG CTTGGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGTCTT
AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT
GAG

SEO ID NO:292: (Length of Sequence =397 Mucleotides)

ACGGGAAGGI GAGIATGINA GIAIGINIGC CAGACAATGG TGITTCCATG TCAATGGAGG TITCTCAGAG AGAGGIGATC
TGGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGIGA CITTAAGAAG TGGGGAACGA GGGAAGGAGG CCAGITTGAA
AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGIAGAAGA TGGAGACAGA
ACINGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTCACA
AAGCCAGGG NAACCTAAAG AGAAAACACT TAGAATTTIN GGAGAANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

<u>SEO ID NO:293:</u> (Length of Sequence = 360 Nucleotides)

GAGGIAAAAT TIACATACAG TGAAATCCAA ATCITAAGIG TACCACTAGA TAAATTITGA TAAATGCATT ATGCCTGGTC
TTCACACACC CTTTTCAATA TATAGAAAAT MICCAGATAA TTTATTTTGT TGTTTTTTTC ACACACTAAG TTCTAGACTT
TTCCAGGTCC GAGGGAACTA TIAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG
CAGAAACACA TCGCAGATTT AAGGTCTGCA ATCTCTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG
CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEO ID NO:294: (Length of Sequence = 321 Nucleotides)

SEO ID NO:295: (Length of Sequence = 165 Nucleotides)

4

GACACACAGC GCCICOGGCC COGCACAGGG GGCATGICCA GAGGIGCIGI GIGICACCAA CIGGICITCI AATTIGGAAG GAGIIGGAAA GGCCITTIIG TIGATGAAAA GITGGAAACA GIGGCACATA TCINAGAGGG AGGAACGAGG CAGCGIGGIG AAGCG

SEO ID NO:296: (Length of Sequence = 315 Nucleotides)

CEAATACAGG TAGTGCCCAG CTGGTTGGGC TGGCCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC ACAGCTAAGG CTGTGTTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAACT TACGTCTCAG TTGCAGCTGG CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACINGCCT TGGCTGNAAA GTCTA

SEO ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGETIN NCGCTNAAGC TIGATNATCG RATIGCCAAT CINCATATIT GIGITAGAAT CATITGTTIT TGIGICITCA
TGITTCTATA AGATAGGACC AATATICTIT ATTGGGCITT GATTITATIT TGIAACITAA ATGTATTAAG GCAATAAATG
TAATTITCCA CINAAAACTA TCATTATAGA TTTGGTTACT ACCTACTGCT CAGCAATTIT TTTTCTTATC AAAATTCTTC
CTGG

SEO ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEO ID NO:299: (Length of Sequence = 374 Nucleotides)

CEATERTITE AATERCATCA CACETEGICE CAAAATEAGI GEIGGCATCA TATERCCGG AAATAAAGAT CIGGCTITCT GITCCCAAGI CITTEGIAC CACEGAGGICA CIGATECIAA CAAATITCIG TICAATEGI TCCAAGAGCT CCAAAGCIGG TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAACTATAG CAATGTACTT CCCTTGTGCT GCTACATTGT GCCAAAAGGA GATCATCAG ACGTAGATAT CTGACTTTCG ATTGACTTTC GTTCTGGA ATAATGATCT GCCAGGAGTT GCCATCATTCG GTGTTCTTTC ATGGGGGTGG CTGAGGGATG CAAATAACCT CTTG

SEO ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT
GGCTTCCTGC TGACTCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCCA
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTGCATGCC ATGAAGAACG TGGCCCAGCT CATCAACGAG CGGAAGGGTA
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG
CTCAGAACTC ATCTACTCGG GGGAGCTGA CCTCGGGTTA CACAG

SEO ID NO:301: (Length of Sequence = 224 Nucleotides)

GGIATICAAA CAAATAGCCI GAGAATIING GGGGGATCIG AAATAGAGIA CIAIGCIAIG IIGGCIAAAA CIGGIGICCA TCACIACAGI GGCAATANIA IIGAACIGGG CACAGCAIGC GGAAAATACI ACAGAGIGIG CACACIGGCI ATCATIGAIC CAGGIGACIC IIGACAICAII AGAAGCAIGC CAGANCAGAC IGGIGAAAAG TAAACCIIII CACG

SEO ID NO:302: (Length of Sequence = 363 Nucleotides)

AGITICACTO TIGITGOCCA GGOTGEAGTG CAATGGOGTG ATCTOGGOTC ASTGCAATCK GCACCTICOG GKITCAAGCG
ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCCGC CAATTTIKTA TITITCGTAC
ACACAGGGTT TCTCCATGTT GGTCAGGCTG GTCTCAAACT CCCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAATTTTA ATGCTTCTTT CAAGACTATT AGAAACCTTT
AATTGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA ACAAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTC ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG CTCCCACACA TTA

SEO ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTGAG ATGEAGTACT CECTCTTG CCCGGGCTG AGTGCAGTGG CGCGATCTCG GCTCACCTGC AACCCCTGCC
TCCCCAGTTC AAGAGGTTCT CCTGCCTCAG CCTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT
TCTTGTATTT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CGTGCCCAGG CTGTTTTTTA ACTGACTTTG GATTTTACTC
CCTTTCTATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG
TGKAAATTGC TTAAGG

SEO ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTITTGT ATTITTAGTA GAGACGGGGT TICACCATGT TGGCTTGGCT GGTCACGAAC TCCTGGCCTT
GAGTGATCCC CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCCAGA TTTTATTGTT
TTAATTACAA ATTITACGTT AACTGATTCT GCACATTTAT ATTIGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATTGGCCAGG CTGGTCTCGA ACTCCCGACC VVGTGAGCCA CCTGCCTTGG CCTCTCAAAG TGCTGGGATT
ACAGGCGTGA GCACCACGCC CGACCCATAG CTCTTTACAA CTGCCTTGTA AAGAAAGCAT CATTTGGCAC TGTTAGTATT
TCTCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTEGIAC AGAGIAIGIC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAAGTTGIAC ATGAACAATA ATTGGAATCA
TCAGGIAATT TTTTTAAACA AAGGITCITC ATTTACTGIT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGISCCATA
GGCTAATTAA AAAATAAAAC CTTGGCCGGG CGCGGTGGCT TACGCCTATA ATCCCAGCAC TTTGGGGAGGC CGAGACGGGC
AGATCACGAG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCCATCTGIAC TTG

SEO ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATCGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAAA CATACAGTAT ATT

SEO ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCCTCT ATTGCCATGT GCCTGGAATN ATNATATGCT CATCACTTTA
TGAAGAATAA AATTIGINIT TCCTGCCTTA AAGTTACATT CGTTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT
GTTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEO ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCCT GAATACGGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATTCTTCCA GTTTCTTTAT

CCTAAAACTG GTGTAACAGG ACCCTATGTA CTCGGAACTG GGCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT

TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAAA ATATGGTCCC TTTGTTGCAG

ACTTTGCTGA TAAACTCAAT GAGCAAAAAAC TTGCCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

160

TECAATTEGA TACEGAGAG GICACAACAG GCACTEGIIT CCAGGAAGCG CCATITACCG TITTIMATEG GMCAAAGGGA GITACATTEG CTATEGCIIT TEGAAG

SEO ID NO:311: (Length of Sequence = 489 Nucleotides)

TOGACTOGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACAGGGTR GTGGAGCCCT ACAACGCCAC CCTMTCGGTC CACCAGCTGG
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC
CCCACCTACG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TGCGCTTYCC GGGCCAGCTG
AACGAGACCT GGCAAAGTGG CGGTTGACAT GGTGCCTTTC CTGGCTGAAT TTTTAATGCC CGGTTTGGGC CCTACCAGCC
GGGGAAGCA

SEO ID NO:313: (Length of Sequence = 302 Nucleotides)

CITCICATEC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTCAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT
GTGAAATCCA CACAGGACAT CAACGCCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA
TGTAACTACT AAATTCCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAAT AACCTTCAGC AG

SEO ID NO:315: (Length of Sequence = 339 Nucleotides)

COCCITATIT AAATTGIGAA AAATAATGAA TATTAATTIG GAGCATAATA TITAAATACA TGAAAAAAGC TGCCTGGGAA
ATGITGGCAT GACTITTCCC AGATGITAGC ACTGCTTCAA CITITGAGAG NGCACTCIGA GIGIAAGITT ACTAGACTGA
CATTACTAAA ATCATTGGIG CIATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGIT GCCAAGCCAAC AATCCTAAAA
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGAATTA ACAGTGIACA CCACATGIGC
GTGTTCCAAT AAAAGGAAG

SEO ID NO:316: (Length of Sequence = 430 Nucleotides)

TAMENTOGIG GIGCIGITCT GGATGCTTCC AGIGGGCCCC GACCAGGICT GGACAATGCC TGGCGCCCGT CCCCCGCCCC TCATCTACAC ACACGCAAGA MITCGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG GAATGAAAAG GGAAAAGTGA GGAACGGGA GCCAAACCCA GGAAGACGCC TCTTTTCCTG CACATTCCCT CTCCTTTATA TACTCAGACTC TTGGCTGTCT CCAGTATGTA CCCACCCTGG TCTTCCAAGC TGGGAGCCAC TTTTTATAAC ACAATCACAG TTTCACAAAC CCCAGGAAGG TTCCATGTGG MGAGAGGTTA AGITTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT CCCCTTTGGT GTAAATGGAA GACAACCTTT

SEO ID NO:317: (Length of Sequence = 317 Nucleotides)

GITAATGCTT CINATACCTA ACAAATCCTG GAGGCAGENC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG
ATCTGAGGCA TCTCGGGGGC AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCCTCGCA TCTTAACCTA ACCTTGACCC
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC
CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGGG TGGGGATTGT AAGCCCG

SEO ID NO:318: (Length of Sequence = 407 Nucleotides)

CTCGCCCCGC ACCTTCCCCG CCTATGCCCC TCGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGCGAC
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCCTGGACC GCCTCCTGCA GGCGAGGCTC ACATCCAGCA CTGTCCCTTA

CAGIOGOCAT GCCCCIGGOG ACCTCAGIGI CCCACICIGI AAGGGGACAA TGCAAATCCC TITGCCTCAT AGGGGCAIG TGCCAGINIT GATAAAGIGC TGGCCACAGG CCCTGCCTIC CCAGGGCTCA CAACACTGIG TCCCTGACAC ACCCGIGGGC TGIAGIGATT CINITCATGG GGATTIGACT ATAACCNGCA GICAGGAATG AATITCACAN CATAGCICAG TACATACACA CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTTGG GGACAGGACA TGACTAAGCA CAGAGCTTTC TTCTTTTGAG GCCACGCATG TGGTGCAGAG
CGGGACCACC TGCATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC
TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT
TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCCAGGCCC CAGGTGACAC CTNTCCCCTG CCTGNCCTGT ACTGNCTGCC
TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEO ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGGC ATGGACAGCC CCCGGGGTGN CCGCCCGCCC CCCCTCGCC GCGTCGCGTG CNGTTCACCA GGCAGCACCT
GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCCTGCGC AGAAAGGATG CGGGTTGGGG CCGCCAGATC CTGCCAGGAC
TAGGGGCCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA
GTTGAGTCTA TCTTTCCTCT TGTAGGTACT AATTAAACAC CTGCTGTNTG CCTGGTACTN TGCAGGGTGG GACAGGCATC
ATAGCAACTC ACAGTGGTCC CCTCTTCTTT GTGCCCATAG TCTAGTAG

SEO ID NO:321: (Length of Sequence = 355 Nucleotides)

GETIGEACTET GCTETTERAC TEAGCTERAC TEGEATCAGG AGAAGGAGAA GTGGGGATTG AGCCCCTCAC CTCCACACAC
TCCTCTCTET GCCTGAAATT CCTCCATTAA GCAGCATCGC TGTCCCCTGT AAACACCCAC ATTAAGCCAT TATTCATCTT
ATGGCTTNAG TAGGCGTTAG TCCCTCAGAT CCTTTCCTGC TGAAAGCGGA TCCTGATAGA GAGAAGGGAA GAGAGATGGA
TGGNTCTGGG GACGCCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TCGGACTCTN GGGNAAGAAA TATTTTCTGG
GGGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC
CCCAGGATCC CCCAAACTCC TCCCACTTCA CCTCTGCCAC AGACCGCCTC GCCCCCAAAC TTCAGCCTNC CCTCATCTGC
CCTNACCACC CACAGCCCCT CCTACCTAGC CCTCTCCGGC GACGGGCCCG CGGGCTCCCC ACATT

SEO ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCCGTGAC CTTGCAGATG CAGGTGACAG CCTGCCCTTC CGTTTTTNTC TTTCCAGTCC CGCCTGCCGG
ATTGGGTTCC AGCCCTGCCC ACACGCCCGG TACATCCCGC CTACACTCAC CGATGTCGCC TAGCAACCCG GCTCGCCGCC
AGCATCCGCA ACCGAGGTCC CCGCGCTCCA GTTCTCTGGN GGGGAGGGAG AGGGGTGTTG CTTCTCCAGC CCCCTGCAGC
CTGGTGTCTT

SEO ID NO:324: (Length of Sequence = 338 Nucleotides)

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GINTICITAT GOGGATAAAA TITCINAGGI AAGAAAAGII AGCICIGAGC AGCCCICCGC CIGATACIAA TACITITACCA ATGGAGAITT TCCITITCIT TICCIGITTIT GAGACAGGGI CICACTITGI TICCCAGGCI GGAGTGCAGI GGIGCCATCA TGGATCACIG CAGCCICCAT TICCCIGGCI CAAGCCATCC TCCCACCICA GCCTCCCGAG TAGCTGGGAC TACAAGGIGI GCACCACCAC GACTGGCTAA TTTTTAATTT TTTNNTAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTTGAATTCC
TGGGCTTCAA GTGATCCT

SEO ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTOCAGACT COTOCAGOTG TOATGGATOO TEGGOCAGGG GATOCOGNAC TOACCCAAAG TEGGGOTTG GGOGGTGGTG
GGOCGGTTCA GTGGTGGAGC GTCTTTTGT COAGCTCAGA ACCTGCTGCC GGTCCGGTCC CAGAAAAGTT TCTAGCGGGT
GTAGTTGCCA AAATTAGGGT CTGINACTGC TGGGCTGGCG GTGGGCGCCT CATCCCAGCC TTGGAAAAGCC TTGCCTAGTA
GCGGGAAGTT CTAAACAGCA AAGGATACAA GGCCCCTTGA GCGCAAGTAA ATTTCCCCTC TTGCAGCAAC AGGTGTCCTC
CAAACCAAGC AGCGTCCACG TGTGINCGGT GGCTGGAGTT CTGCAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC
CGCTTGAGAC CCAGAGGCAG TTNGGGGGAG AGGCCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEO ID NO:326: (Length of Sequence = 391 Nucleotides)

GECCCTCCAG TGTCCTGCAG AGAGGCACIC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCCAG ATAACTGACC CCTCAAAAGC
CCCCAGGACG GCAAAATCAA AGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAACTTT GCGCTACTCC
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT
TGCTAATCAG TAACAAAATA TCCCTCTAAA CCCAGTCCTG CCTTGAACCC ACAGCCTCAG GATGGTAAAT A

SEO ID NO:327: (Learnh of Sequence = 438 Nucleotides)

TACTGACTGA CCCTGGS: GATTCCCAGC CGAGACGTTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGCGCT
TTGCTCACCT GTAGGAGG: TAGAGGGAAA TAAGACAGCC CTTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC
GCCAAAGGCT TAGCTCAGTT CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGGA CTCCGGTTAAA TCTCTAGCGC CATCTTTATT
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTTT TAAGTAGGAA TTCTTNGACT
AGACCTCTCA GCAACCCTTT CCTNTCCGTG ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCCTAGAAG TCTCCCATTA TGGTGCTGTG TCTGCTGGGA CCCACGGGGC GCTGCACAGG GAACCATGTG
GCCGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCCACA TTGACTAATA TTAAATATTA GCCCAGCTAC CCTGCTGGGC
TGTCCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAGGAT
TTGAACTCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEO ID NO:329: (Length of Sequence = 227 Nucleotides)

GECTIGGECTA AACTICCAGAC GCTIGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTICCGGG GCGGGTAGGG GTGGGTCATG TTCCTTGGCT TGGGGGCAGT TACAAGGGTA CAGTIGGGGCT TGTTGAAGGG CAAAAGTTCT GTAAGTNCGT CCCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEO ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTC AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCCTCAGGC TGAAATTTTT
GTAGCACTTG ATCAGTTGCA AAGTGATCTT CCCTTTAATA TCTCATTTTA TCATTGGGTA TCTGAAGAG AAGTGGAATT
GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCTTA AAGAAAACTC

TAAGGATTIT AAGGAGAGIC AAACTCTACA TICATCCAGG CAAACATCTA CICTICCATT GATTAATGGN TCCACTCATC CGIGCAACAC AITCACCTCIT TCATCCATCC ATTCATCCAT CIATCCINCA TCAATCCATC CATGIATCIT TCATTCATCC A

SEO ID NO:331: (Length of Sequence = 322 Nucleotides)

COCAROGITG COCOGCUTT GICTOCAGOG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC COGCACTCIT
ATTGGCTAGG TTCCCCGACT TCCGCTCTCG GITAGGTGGTT GGCTTTGCCT GITACCTGTG TTGCCCACTA CCACTCGCTC
CGCCGAGCCC CAAGGATGGA TCGCTATCCC GIAGCCGGGT GITCCGGAGC GCTGCGGGCA AAGCAGACCG CCTTGCGCCT
ATTATGGGTT GAGTGGCTCT GIACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCCGTGT TGCCTTCGCG ACTGCAGGTT
TT

SEO ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCIGCACTC TIGCACTCIG GCCTTCTCCC AGGCTGAGCT TIATCATATC ATCAGCAGCA ACCIGGAGAA
AATTGICAAC CCAAAGGGIG AAGAAAAGCC ATCIATGIAC TGAACCCGGG ACIAGAAGGA AAATAAATGA TCIATATGIT
GIGGIGGATTC CCTTCTGGCG TGIGTCATTC ATTCAAAAAG CATTTATTGA GIGGCACCTA TGICCAGCCT GAAGATGAAT
GIGGIGGGAA GGGGIGGGIG TCACAAAGGAC AAAGATGACT TAGATGCCCA CTGIAATCTT GACTGIGAGA AAGAGGGGGAT
TCAGGCCCTT TCTCATCCAG TAGTCAATGI GCCATCTCCC CTTCCCTAGT CACCICTTAT CTTCACTTAC CTTCTTTCTT
CTCCTGCTTA TCTGITTTCC ATCTAAGGCA AAAAGGGGGGG

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCETAG ACCGAGTAGC TIGAGCECCT CTTCCGGTTA CCTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCCTC
GCTCAGGCAC AGAGNCCCGA CACCGAGCGG CGGCTTCCCC GGGATCGAGG GACGCGCACG CCAGAGGAGA CGAAAGGAAC
CCGGGTCGGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGCCCTAG TGAGTNTGGA TTTNGCCGGGG TTCCGGGGGTT
CCGACGGCGA CCTCGGCGAC CCCTCACTCA CCGCTTCCTC TTTNCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG
TNGTTCGAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCCGCTCC GCACCCGCCT TTCCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTTACT GGAAAGCCGG CAGNGGNENG GGAGAAGTGA GCNCCGTCTC CGCGCCTCCT CGGTCCTGCT GGCTGAGCGC GGGGATGGCT CCGGAGGGAG ACACTCAGGA AACCACCTCC GCCCTTCCCC CATCTTTATC CAGCGG

SEO ID NO:335: (Length of Sequence = 261 Nucleotides)

TOCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCCTGC TGGGGGCCCC TGGNAATNTA
AGTCCTGCCC CGGGCTGTGC CGCCCTCCTC CCTGANAGCC CCCTGCNTCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA
GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GGTCCTATGG GACTAGGGCT GAGGGTACAC ATCCTGCTTT
TTTCCAGAAT ATAAGTTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

OGGAAAAGCG CITCGGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGRICCG GGACTCGAAG GCCCACCGNA GNOGGACTAA GTOGTCCAAG GAGCOGCCTT CGGCCTACAA GGAACOGNCC AAGGCCTACC GGGAGGACAA GACCGAGCCT AAGGCCTACA GGCGGCGGCG GTCCNTCAGC CCACTGGGAG G SEO ID NO:337: (Length of Sequence = 279 Nucleotides)

CCTTAGGGCT CCTCCTGACT CCTTCCAACT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTC
AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGCC
TCACAAAACT TCTGAATGTK GCTCTGTCTC CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC
GTAGCTGTCC CTNTCCACCT GTNGCCCTCG CGGAGGCTT

SEO ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNOGTEG AGGEAGGCAA AGGEGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTAA AACAACCAGA TCTCTTGTRA
ACTGAGAACT CCCTTATCAC CAAGGGGACG GTGCTAGACC ATTCATGAGG GWTCCGCCTC CATGGGCCAA TCCCCTCCCA
CCAGGCCCAC CTCCAACACT GGAAATAACC TCCCAGCAGG CCCGCCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT
GGAAGGGGAC TGATGGAGCC TGGWTGTTTK TCCCCGCCCA GSTCTMACGC TGAACCGTAA TCCCCAATGC TGGAGGCGGG
GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GECACCEGEC TETCTCTNET CCAGCTAGCC TCACAGEGAG TEGCCTCTAA AACNEGCCEG CCCACNCCAT TTEGAAGCTG
TCCCGGGTTT TCCGTGAAGT CCTCCCGGCC TGTGGTCTCC TGGATGGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT
CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGGTN TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG
TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTNACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT
GAGGTGGATC CAAT

SEO ID NO:340: (Length of Sequence = 450 Nucleotides)

SEO ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCCT GGCGCACGG CTTGTCCCTC GAGGCCCGGC CCCTTCCCCT TCCGGAGAGC CCACCGCTGG GTCCTAAAGC CCACCGCTGG GTCCTAAAGC CCCCCGGGTN TTTACCCAGG ACGGGGCTGG GGAAACCNGG TCTTTCCTAG CTCTTGGNTT ACTTCCTGGA GACTTCTTAA AACGAGAGAGA GA

SEO ID NO:342: (Length of Sequence = 229 Nucleotides)

GIGGIAACIT TITTAAAAAA CATAAATACC ATACAATICA TCCITITAAA GIGGIAATT CAGIGGITIT TGGIATATIC
AGIGITGCAC AGICATCACC ACTAATICCA GAATATITIC ATCACNCCCA CGGCTGTATC TCCCATITCT CICTICCCKG
CAGATCCIGG CAACCGCIGA TCTACTITCT GICTCTTACA GACTIATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

WO 93/16178 PCT/US93/01294

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TECTOCAGGA AATTGGAGÍT CNAGCTGAAG GCCTTGCNGC ACTCCGNGCA CTCGTAGGGC TTCTNGCCCG INTGCGTGCG
TOGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT
CTCCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEO ID NO:344: (Length of Sequence = 227 Nucleotides)

TOCGCAGATC ANATTCACCC TIGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGACT TGGCCTSCTG
GAATGCATGC CCCTAAACAT CTCTAGACTA GGGGCAGTKT CCGCCAACCA TGGAGGCCCT CCATCACCAT CCCTGCAGCA
TCACCACCNT CCAACCCCCA TGTCCCACCC TGGNGNTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEO ID NO:345: (Length of Sequence = 249 Nucleotides)

GGGCAATGIT GICACAGATG TGIGCAGATT TISCAGAGGA CATAAGITGG CTGIGAGGWA GAACACAGAG GITSCCIATT
TTTTAGGCAG GAAAGAAAGC CTGCACTTT CTGIGTGIGT GINTCAATAA ATCIGAATAA CACCTTGAAA GGGITAAAAA
GCIGAGCACC AGGIGTTTC TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGITA TCTCCCITCC TTCCCCACGA
GCCAGCTTA

SEO ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCIAGICCE GCAGCOGCIG CAGCOGCIGG GITGGCGGAA GAGCIGGACG CCGAGCIAGA GGACGAGGCA GAGCIGGACA
CAGIGGCGGC GIGAATIGGC CACINCITIC GGAGCCCGAN CICTCCCGCA CIGGAGAGGA CITCTICITIG GCIGGGCGGC
TCTIGGITCC GCICCCGCIC TGCIGCTGCT GGCGGCAITT NGCGCGGCGG TTCTIGAACC AGACCIGCAG TGGGCCGGAT
GGGGGAGAGI GGGTCAAAGG GAGCIAGGGG AGCIINITIGC TCCACCGICC CGIGGACCCA ACICCCGGTC CAGAATATCG
CAATCCTTIC TCACCGAGGC CITCGACCCI TCCIGI

SEO ID NO:347: (Length of Sequence = 155 Nucleotides)

GCCGCGGGGC GTCGGATGCC CAGCTCGCGT CCAGACCCGC GGGATGCAGA CCCGGTTCAG TCAGGCTTGA GGGCTGCTCC
GCATAGACCA ACGTCCGGGG AAGGCACACA GTGGCCGAGG GCCCGCGCGC TTKGGCTACG GCTGTRATGG TATCT

SEO ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCCGATT TAACTGATTG TCTCATTCTG CTCATACATT TCAAGITTAA ATGCAAGCAT AAAATGITTA TCAACAAATC
TAGAGAGCAC TIGGATTTIN AATTTCCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCINCTGTTA CACAAGGCCT
GINCTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAAGGA CAGAAGCTTA GTGGTCACAA
ACAAAAAATA ACACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACTAT TACANINACT
AATAATTTGG GCAATGAGAT TCCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AAATCCITIT TITTITTIT TITTITTITT TITCAAGTAT CACAATGITT ATIGATAGAT ACAAGTATAT
AAAATCAGGG CATGANCATG ACTIGATAAA TIAAGTAGAC TITAATTICAA TACTATAATA GGNGGGACCA ATICAAATTC
TCACCATTIG TITCACACCC ACAAAAACCA CTICAAGGGC ATIAACGNIC TCTCAAAACT GNICAGTITT GIGCAAGTAA
ACCATGITTC TITTIAAAAAG ACTIGIGCAC TIGCCCAGGC TCAAGGITAT TAAAATCTAG GCACATAAAG NCCATTACTA
GAGGIAGGAA ATACAGGCAA TT

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCIGIGCT AGCIGIGAGG CAGCICIGGA ACGIGAAGAG CIGITIGGIT TGANCCGIGA ACAAAACTGI GITTIGAGIT
TAGCIGACAT TAAAGAAAAA AGITCATCAC GIGACIGITA ATGIAAACCI GGITATTAAA ATAACTATIT AAAACAGGAG
AAATCIGGIA AGITGITAGG MITCIAAATT CCITTITAGIC TGITCACIGA GATATTAAAT TICAGIAGAC AGAACCCAAA
AAGAGATTIC ATTICITICI AATCACTITG GCITCINICI MITIINITAA GIAGGIAAAA ACCITCCTIG GIGGCACCT
AAGCAGGATG CAGCCAATTA GITCATGAAC CCAGCIGCGG ACGIGAAGGC TIAAAATCTA AGGA

SEO ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTTGGCCAG GGCTCCTCTT
GTGGCCATGT ACCCAGGGCT GCCTGGCCTG CCATTTGCCT CTCCCCGGAG ACAGCCGTTC TTCTGCAACC ACACCCCGTG
CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCCTAAT GGGATATCGG
TGATCACTGG TCCACCCTTC CTGTCAGGGC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTTAA

SEO ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT
ATATTTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT
GCATATGATA AATCTGTCAT GTTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTG GGGGAAATTA
AAATGTGATG CAAAGATCCT TATACTTTGT

SEO ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG
GTGCCTACAC AACTTTNTGG NTGTACTAAA TGCCG

SEO ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTITI TTATITITGI AGAGAIGGAG ICTCCCAAIG ITGCCCAGGC IGGICITAAA CICCIAGGCI CAAGGGAICC ICCCAGCIGG GCCICCCAAA GIGCIGGGAI GAIAGGCAIG AACCACCAIT CCCAGCCCAI ITCCITITIC CCITIGCACA GIACCAGAIA TATGGIIGGI ACIGCAGAAA TAATITCCCC CIGCCCICIA CAITGAICAI TIGAIGACCA AAIAGIGICC GICIAGCCAC ITATITAIGA TITGIACAAA ACATICCGCI TICIGAGGIA GACAGIGAIA TICIGAAGCC ATCAGIAAGA GIAATITITC AGINTIGIIG AAAGIGCACA TICITITGIGI AAAGGICAGC CIGICAAGGA AAIAGCAT

SEO ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGGAACATCT CACTCTGATA GATTTGAATT TNCTATTTCT GCTCTGTGAC AAAACCCTGA
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGNAATG GCTATAGTGG TGTTGAGCTG CTGTGAGATG
ATTTACTGCA ATTTGTCACT TTTTGAAACT GTTCCAAAAT AGTCTGCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC
TTTTCCAGTT AAAAAAACAG TCAAAAAACA CCAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAACTG GGTGAAAAAA AAAAGGAAAT GGGAATGGAG TGGAAGGGTT
GGGTGGGAGA GACACTTCAC AGTATTCTT TTGTTTTGAC TTTGGAAATG TTACTATTTC ATAAACTTAA AAAAATGCAA
AAAAAAAATA TCAAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCCTAACA CATTTTGAGT
GAATCACAAA GCCAAACCAA AAAAGAGCTA ATTTAAGTCA CTTTTAAACT TGGTGTTTAA CTACCTACAC TCAGTCTAAA
AACGGNAAAT AAGGGTAAAG AAATAGTGGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGGG ATGGCAACCT
G

SEO ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAAGATC ATTTCTTTTT
GINCCIGIAA CCTAGCATIC CITCTAGGCT TCINCICCIT TAATTGAACC ACAGCITAGC TCATGTATTC TITTATTAAC
ACCCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN
AAAAAATAAG NCTAAAATCA GGGGAAGATG TATTT

SEO ID NO:358: (Length of Sequence = 314 Nucleotides)

GIGAAGGAAG TATGAAAACT GAGACTAATA TIATGAAGTC TTITTITAAT TCTITATCIT ATTGCCCATT TITAACCCCT
TGGIGITIGA AATGGAAAAT AAATAINCIC TICGCGATAG ATAATAIGIC AATAACCAAA AGGIGGCCIT AACCAATAAT
TGGCCCAACT TIAAATTAIT ACCCTAAAGA TATATAAATT ANCTAATCIA AAATTAAATG CAATTITGCT ATGACTTAAA
GIGICANTAA TCCIGIATAA GNGATCCNNT TIATGCAGIC ACTTAGGCAT GAAGITGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC
GACAAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC
CATTTTTAGA AAAANGGAAT ATTGAAAATA TTGAAGTAAA TATCATAAGT CATTCTATTA CAAAAGGCATT AACTCCTTCC
TATCAATAGA ATGTACCAGT TTAAAANTTT TTAGTAGGAA TATATCTTTT ATTTTATTAA CAGAAATCAN GGGACAAAGA
GGATTTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEO ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATTCTTT GATACCCACC TAATAAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGIG AGINCITATT
TCATTCAAGA CAGAGCTTAC CITTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTTCTG AAAGCAGTTT GGTCAAGTGT
TTCAAGTAAA TCAAAAGATC GGTTAATCAA TTCCTTAGCG AATTGGATTA GACACTCTCA TTTCAAATGG CAGTTTTATG
CTTACTCATT GTCTTGAATA ANCTTAAATA CITTATGCTA TCTTCCTGCT CCATTATTTA TGTAATCACT GGGNCCTTAG
TATTCTGCTT TAGNNCATAT AAAATCACTT NCAGGTATTT TCCATCACGG ACACAGAGGC AGGCACAAAT TAACC

SEO ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTITITIGI GGGGAGAACA TITAAGACCA TITCAATGIC ATGATGAAG CIAATGGGAG AAGGCTITIN TNCIACAAAA
ATTINCITIA TITIINCAAC TITAITGAGG TIATAATTGA TATIAAAAAA CIGIACAGAT TIAATGIGIA CAGICIAATG
AGIIGGGACA TATGCTTACA COCNIGATGC TGITACCACA GGCAAGGIAA TACACATATC CGICACCIGC AAGAGITTCI
GTGITICCCN NIGITTCICA TITICNITIT TTCAAAAATT TACITTATAG GGTTATAG

SEO ID NO:362: (Length of Sequence = 437 Nucleotides)

ATGCTGGAAG TGATTTCTGC AGCTCAGGAT TTTTTTTTTA AGCTACATTG AAAATATAGG TTTATTTTTT GINCAGGTTT
TNCTTTTATA TTTTTTTNCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTTA AAGCCAGCTA
AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCGTTTCAT GTAATGGGAC
ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACTTTTC CTTCTCCACT GCCCGCCGGA GTTCCTCGCT
CAGCTGAGGG GAGTCGTCCT TGGGCGGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCCTG GAGGCTGCCA
AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTIGAAG TAAGCTITCC ATGCTICACT TAGGGTGGGA AATTITAAAT ATCAGAGCTI TCTTTGTTAG CAGCATATAG
TTATGCAATT TATTIAAATC TGCAGTGCCA ATCTTTTTTT GATGGGTGTG CTTAGACCAC ACATTIAAGA TAATTATTAA
TATGTTAGAA CCGAATATAT TTINATGATT AGTTTTTATG TGTCAATTTG ACTGAATTAA GAGATGCCCA GACAGGTGGT
TAAAACATTA TINCTGGGTA TGTTTGTGAG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG
ATAAAGATAA TACTTGTCAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG
TGAATTATGT CTACCCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCCC

SEO ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTETETAA ATACACTITA TITICCATIT INCCCECCTE GECGACATET GAACAGECAG TETECAAAAT GETEGCEGEC
AGTETAGEGE GCGTETEGAG AGCCCCGTEG GTENCTECCC CGGTCCCCAG GCTTCGTAAC ACTGAAAAGT GEGCAGCTAG
GAAGCCGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGNAGATIN CITGTAACGC TACTCTACTE GAGGCTCCGG
GAGCACCGAG NGGGGCAGTC CCCAGGGTCA TGAGGCCCGG GG

SEO ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCCTGCCT CAGCCTCCCA AGTAGCTGGG ATTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTTGTATT
TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCCGGGCTGG TCTTGAACTC CTGACCTCAA ATGATCCGCC TGCCTCAGCC
TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACCACANCT GGNCTTTTTN TTCTGTTTCT AACTGTTCCC TTTTATTTCC
CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCACTTATA GTCCCAGTTA
GGGGENNGACG GGTCACTTAA CCACTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG
CTTTTACTAT TGACAAAAGC CGGGGTCAAA AAAAGTAGTT TAAGTCTTAA GNCTGAATAT GCATTAAAGT ATGCAGGTAG
CAAAGATGTA ATAAATTTCC TTAAAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC
NTCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTT TAAAAAACCAT
TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEO ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAAACAAC CITTAAGTAC AGTAGTICCA AAACACCIG CTAAAGTTAT GAAATAATIG TGGATCATTT
CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATINCNC CTTAGATTCC AGCAGAAAGA
CTAGTTTAAA GTAGTAACAT GCACGTIGAA GTATTCTACA TTTTCAGTCA CTTAAACTTT CCTCTCTCAG ATGGCTACAA
CTTTTTAATA TTCGACGTNT ATTTTATATC TAAGTAAAAG GATTCCAGAA TACTCCTGCC CTGCAAAACA GTAGTGTTTT

AGAAGNCTCT NGGAAGTGTT GCTGTTTACC CTTTAGCAAA GNENTACAAG AGCTATTAGT TGTAATAATA C

SEO ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTICCCITC TECACTOGGI TOTOCIGCIC COCATITACA TEGITTACIT CATTITCCIC TICATCCATT GGATICACAT
GIGITCIAGG CCAATATICC AGGNGIGCIT GGAGIAAAAG TOCTOCIAAA TICAATITIG GNICIGACCC ATCAGGGCIG
CIGAAACCAG CATCITITGC AGAAACCCAG GCAGCAAAAC AATCACTITC ATCCAAAAGIA ATAGITAACA TOCCIGITIT
TAAGICIACI GAGAACCAAT TIGGCACATA CACCATITITA AATCITINCT TAATITCATC TICAAAATCC ACTITGCCCA
GATCITCAAC TITACATGGC TICAATACAT COCCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGIATI CITTAGAAGI TITTIGITTA CITATGITTI NCICITITTAC ATCICCTGI GAATITCIGI CCCATTITGA
AGICTCTCCI TGITCTCGAC CAAGATCCCC TIGATGITCT GIAGCCAAAG ACTGAGAAAA AGAGITATIC TGAATGATGI
AGAGGITGAT AAGICTGGIA AGAAACTGIT GGACATACTC CAAGCAGCAC TGCATTGCAG TCTTTTGGGC TGICTTCCTA
CTTCGGGITG CTGICCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTITIA CACTGCTGGC CTAATTIGIA GATATCCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCCT
CTATTITINIT TACCAATGGG TGCACCATTG AATGTTGGCC ATCAAATAGC AAATACCCTC TGCCTGTATT TCCTACTININ
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC
AGAAAAGCAG AGACTTCTTT TGGGTTTAAC ATCAGCAGAT GGGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAAT
GCATCTGTCT TCTTTCTCAC TGGGCNTTTT TTTGATGGCA TTCAGGAAGT TTCTGACTTT TNCTGTATCG TTAATTCCAT
CTCTGGGGCCT CATGTCCTTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTCACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGINT TTCTGGNTCA
AAAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCCTGGNTCC CTCTCTCTT GTGCAGGAGT
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTC TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTCAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA
TCACCTAAGG GAGGTCGGTC CAGGTCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGGAATT T

SEO ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATIGT TGITACTGGG AGGTTGAAGG GAACACAAAT TCAGTTATAA GICCTTTTTG AATACTAAGA GGGGAATAAT TAGGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAA AACTTCAAAC AATTITCCCT GIAACATGAT TTTACTTGCA TTTATAAAACT GATTTTTTTT TCTAAGCACT CCTTTGATAA TGATTAAGTG TGGGGTTACA TTATTTNAGG GICGTCTAAT ATTTAAGGTG ACTTAAAAAAC CICACACACG TTAATCCCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT CAATTTTCCT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEO ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCTTGTG CGIGIGIGIG TGIGIGIGIG TGIGIGIGIG TGIGITTTGC TGIGGAGTTG AGITTCTTTG TAAATTCTGG ATATTAGITT CITGTTAGAT GAATAGITTG TGAATATGTT CTCCCATTCA ACAGGTTGCC TCTTCATTCT GITGATTGTT TCCNITGATG TGCAAAAACT TTINACITTA ATATAGITCT ATTTGTTTAA TTCTGTTTTT CTTACCCATG CTTCTGAGAT 170

CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTTCCCCTG AGTTTTCTTC TGGTAG

SEO ID NO:374: (Length of Sequence = 278 Nucleotides)

GOGITTIGGI TGAGGITTCT ACCICATIAT CCAAGATATT INCITICCAG CCAGCAGAAA GAAAAAGGAG AAGAGCIGCC ACCITITGIA TCCAGGATGA TCTCTINITG AAATCCITGA TTTAATTATA TCTGCATGAC CCTTINCCCA ACTAAGGITA TATCCACAGI TACCGGGGGI TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGICTCAGA AAGITGCACA AAAAACTTCT ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEO ID NO:375: (Length of Sequence = 321 Nucleotides)

GGIGACAGTA TITTITGIGG TITCTGIAGC TCCAGCCCCT CAGAAGGGAC GCCTACAGIT GGCAGCIATG GCIGIACCCC
TCAGICATIG CCCAAGITCC AGCATCCITC CCATGAACTG CTCAAGGAAA ATGGCTTCAC ACAACACGIC TACCATAAGI
ATCGIAGGCG CTGCCTTAAT GGIAAGAAGI GIGGGGGGCA GGAGATGAGC CTCTGGGCCC GITATITIAGA CCCAGAGIAT
AAGAGITGGG GGATACGGG ATAGGIGACI CITTICTCTG ACTTCAGAGC AAAAAAAAGA CATGACATTA TAGCAAGAAA

SEQ ID NO: 376: (Length of Sequence = 337 Nucleotides)

GGAAAATTA CAGCATGACT ACATATGTTA GGAAAAAAAT ATCTAAAATC AATTAACTAA GCTTCCATCT TAGGAAACTA
AAAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTTCTTTG AATCAATTAA TAAAATTGAT AAGCCTCTAG
CCAGACTAAG AAAAAAGAGG TAGGGCACAA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA
TATTAAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GITACAATIG AGAAAACATA TITAATAAAT CATIGICAAT TITINATAAIG TITICAAGCCC ATTCTITIGIT GATAGCCTCC
ACATITATAT GGITAAGICA TIGITGCIGI GITTCTTACC TATGACATTA TITINATATC CCTICATTIG TOGATCTTAA
GATGITGCAG AAGGITCATT CCTGTACCCC AATACAGATT CACITCCTIT AGCIGCCTIT NCTAGCACCA ATATGCTITTA
AAAAAAAATG CGCAAACAAC AAGCAGIGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA
AAGGIGIGIG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTC CTTTCTGAGG CATTCCCTCC
ATTCCCCTAA CCCGGATACA TGCATTAGGA ATGTAGCAAA ACCCTTCCGG GAACC

SEQ_ID_NO:378: (Length of Sequence = 349 Nucleotides)

GATGGICACG GGIGITIATI ACIGGACATG CICIATGCIT ACITGCITGA AAACGCICCA TIAGAAAAIN AACICIGAAA ACIATATGCC CAATGCIAAT AGIGGGIATT TATTGGIAAC ACICITIATC AGGIGCIATG ATTGITGATG GCTTTATTIN CINCITCATA TIINCTATAA TINCTACAAT GAACATGIAT GTATAATCAG ACAAAAAAGC CAAGAAATAT CCATAAGITT TNCTGGICAT TCATTCATCC CATAAATACT TGCTGAGCAC CTGCTGIAAG CCAGGCTCCG AGCCGGCTGC TGGGIGGAGT GCCGCACCCC AGGGAACGT CAGCCCTCG

SEO ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTITGAATC ATATTITACT TATAGGITTG CIGIATATAC TGATTAAACT TCIGAACCTA AAGATTCICT ATAATTAAAC TAGCACAAAT ATAATCIGIC CCITACCCAC ATIGIAAGAA TGICIGGIGG GGGAAATCCA ATATTGACCT TCACATTCCA CATGGAAAAT CTTTGICCCC AGAGTGCAAT TAGGGIGATT AAAAATAAGC AGCITTTGIG AGICTCAAGT TTGITCCCCA AACAAGCAGC ATCAGCAACT GGAAATTTGI CAGACATGCA AATTATCCAG TCCCACCTGA GACTTCAGCC CAGATCTATG

GATCAAAAAT TITGGGGGIG ACCCIGGGCA ATATGGGCIT TAATAAGNCC CIAGGAIGGG TICIGAIGCA TGCICCAAAT TIGNGGAICA TIGNINCINI G

SEO ID NO:380: (Length of Sequence = 311 Nucleotides)

SEO ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCIGIGAA CATATATTT NATTIATCTI AAATACCTAA GAGIGAAATI NITGGITCAT ATGIGGGIAT ATATICAACT
TIGIAAGAAT CIACCAAAAT GATITICCAA GIATATGIAT AATGITATGG TCATCAGANC TACATGATAG TIAGAGITGG
TTAACATACT CACTGCAATG GATIGACTIT CCTGTGATTC AGCIATCCCA CTCTTAGGCG TATACCCAAG AGAACTCAT
AATGICCTIG TGIGCAGCTI GIATGCTAAT GATITIAGTA GIATTITITG TAATAGCCAN AAGGIGGAAA CANTGAAAAC
TTTCACGGAA ATGATTAATG AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG
GIATACAAGA AACACCACAG GITAACCNIT GAAAGTATAT TA

SEO ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTIT GGAGCCANTC CCATGIGAGT TIGAGICICA GAGTGACTCT GGGCAAGINA CTTAGGCTTT CTGAGACTCA
CTTICCICCT TIATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGITGT TAATNAGACA TAAATGAGAT AGTGTATCTA
AAATGTGATT TGITAAGTCT AATACGNAAT AGATGCCTAT TIGAGIGTITT CINATACTCA GGATGGTTCT TGGGATATAT
TINCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC
CTGAAGACCT ACCATTT

SEO ID NO:383: (Length of Sequence = 421 Nucleotides)

GRGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTCGCTTTC TTAGGTTCAC AAGAAATGCG CCGGTGGGGA
ATGAACINTI TCATTAATAA AACCTAATIT GTCTTGATCC ATTCCACTCT ATAATAAAAC AAAAGATTTI NIAGGCAACT
CGGAATATAG CTCTTTTGAA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACTGACA TAATCTTGAT
CINITAATIT GTAAATATTG ACANTTINCT TTCTGCACAT TTTAATCTTA GTTTCCCTTT TGATTTINCT GAAGGTGCCA
AATTCCATTT AACINCTTTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTTGG GGGCAGGGGG ACCNCGGANG
TAGTTTAATT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

T

GEACTCCGTT CCCAAGAATA AGITTIGCTT GEGCGGAAAG TATGIGGTTC ATCCGAAAAA AAAGAAATCA ATGATTIGTG
GCAGITCTIC ATGIGCTITT GGGCATTINC ATATCITCCT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA
TATTAAAATT ATGGGICATG TATTATGGCT CATACCIGIA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GGNICACCIG
AGGITAGGAG TTCGAGACCA GCCTGACCAA CGIGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGITAGC CAGGCATGGT
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNITTCCAGT
GAGCTNAGGA TTGTGCCACT

SEO ID NO:385: (Length of Sequence = 404 Nucleotides)

GIGACAAATG TTAAGAAATT GIGIGICAAG CAAAATACIT TAGAGGCCAA TGGGCCACAT GITITTAATA TCAAGAGAIT ACACACAAAA TTINITTICI AGCITCITIT GAAAAATCAG AATIGGGAAG ATGIATTCAT GAGIGACIGC TGCCCCCITT GGITGGGACT CGITCCITCA GGITCATTAC ATGGICATCA ATAACCATIT CCTTGGICCC TGCITTTGIC TTGICTGGAC TCTAAGCATT TGAATTITTA GIATTATAAG AAAACITAAT ACTTINCTAT CAGICACCAC ATACATGIGT TTCIATCTGI ACTACGACT ATTAAAAAGCN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAAC TGGIGCCING ACTAGCAAGG AATT

SEO ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTTGTGGA CATTTACGTG GTATCTTTAG AGCAAACACA GAGTGGTTGC ATAAGCTGCA GTGTTTTAGT ATCGGTGGGA CTGTGGCATG GCGTAGAGGA GTNACAGTCG CAAACTGATG GCCCAGCTCT GACCCTCCAG GCAAGTGGAC TCCGAGGAGT ACCAGCAGAT CTTCCCACAT GCGTCGGGGA GGGCTCTGGG GAGAGTCAGT GGGCAGGAGA GGGTCAGCTG TGCAGGCTCC AGGGCCCAGC CCCGTGCTTT CCCCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTITAATG ACATTITATI TAGGCCAGGG GACCAGGIAA CATTATTITI AGGAGGAGG CAAAAGGIGI TATATTACIG CITCIAATTA CCTAGAAGGA AAGCATTIGC TACACTGCCA TTATGATTGG CIGCAGCAGT TCAACCIGGC TCTCGGAATC TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGI TACTATGGGA AGACTCTATT GIGGCATCAG AAACACAAAA AACACTGGAT ACAGTTAGIT TCTGITGACA GITTCAGAAG AAAATCCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGIT GICACTACAC ACAGCATGCC CTGAACCCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTTGTAAG TCTGGGTTTA TAACTTTACC GTAAATCACC
TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT
GGCTGCTGCA CTTGCCTCTA ACAGGCCAGT TTAAAACGTC CAGGTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC
TCACAGTAGC TCAAGACCCG GCCCAGCCTC CATCCCCAGC CTTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCGG
TCTTGGCTGA GTGGACAGCC CCCTT

SEO ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACCTGCCC CAGCAGTGCA TGCAGGAAGA CTTCCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG AGCGGGAGAA TGCAGCCCAG CTCAAGAAGT GGCGGGAAAC GCGGGGGGGTGA CTGCAGTATC GGCCCTCACG GCGACT

SEO ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTOTOGOT CTGTCACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCCTCCCG GGTTCAAGTG
ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG AGATTACAGG CACGTGCCAC CACGCCTGGC TAATTTTGTA TTTTCAGTAG
AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAACT CTTGACCTCA GATGACCCGC CTGCCTCAGC CTCCCAAAGT
TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGCAGTTG
AATTGTGTGA

SEO ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCGG CTGCTGTAAG GACACTGGCT GCAGCAGGGG AGGCACAGCC AGGCCTGCGC ACTAGGCAGA GCTGGTGTGG GAGCCAGGAG CAGATGAGAA CCCCGCCTTC TACCAAGTTG GCAGTGCAGA AGGCCGCACT CCCGGGTGCT GATGCCGAGT TCAGGTCCAG ACCCTGGCAT CCCTGGGCTN TCAGGGGGCCC AGGAAGCCCC CCACCCCTGC AGENTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA

SEO ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA
TATCCTCATT GTTCTCATGG TATTAATTTG AAGATACTTA CCTTCGAACT AAATCTGGTT TTAGAAGAGC TGCTTGTTGT
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA
ATATACAATT TGTTACTATT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA
TGTCTGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEO ID NO:393: (Length of Sequence = 404 Nucleotides)

CCITITAGIA GCITCTCIGA GGIGAAACCA CITCTITTIG ACCATCIAGC GCANICINIC TITACATCAA CCATTIATITI CAAGIGIAGI GIGCTICAGA GICIGAAAGA GCIATIGCAG AATIGGCIGI TGIGGCITIC TAIGGACAIT CACAIGAAAC CIGITACAAA CAGICCICIA GAGACAACTI TGGGIGGATC CATGAACTCT GIGICTAAAC TGATCCACTA TGTAGGGIGG CIATCCACTA CIGCAATGCG CITGGAGAGC AACAATACTI TCTTGCIGCA CITTATITTIG GATTTCTATG AGAAGGIGGG TGACATATAT ATAAATNATA ACCITCCATT AGIGGGIATT GITTCCTCCT GGGGATCCIT CIATTCIGCA CICCTCAGCC TGGG

SEO ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACAC GGAGAGGGAG AGCTAGAGAG TEAGACACCA GGGGAGCTGA GGGTGAATGG CTGCTGTTAG AAGCCCTGGA GACAGCCTGA GGTCAGAGCC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCCTCCAT CAGTGAGTAG ACGCTT

SEO ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT
GAGTGAGGAC AACTGAAATA ATTATGGATAC AATTAAGGGT GGTAGGTTAC ATTTGTATAG TTCTTTAAAA TATGCATTAT
TCCACATGAT CAGAAATATA AAANGANCTA GACAGATACT GGTAGAGAGA CAATTAATTT AAATTTGTAA CATATTGCTT
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGITCT CACGITAGGG TGCTTTCTTC CCCGGCAGAG TTTTTCGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC
TAGAAAAGTC ACTCCAAGCA AAGITTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC
CGGAAGAACT CCCGCACAAT GCTGCTCCCA CTCCTGCGGA GGTTCCCAGA GCAGGTCCGA GTCTCCCTCT TTCACACGCC
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCCTGAGCGC TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC
TCTTCGACAA CAGCGTNATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTC
CTGCAAGGA

SEO ID NO:397: (Length of Sequence = 414 Nucleotides)

9

ACAAGCIGIG TGACCATAGG CAAGITTGAC CTITCTGAGC TGCCATTITC TCATGGTAAA AGAGAGATAC TAGAGGAACC
TGCCTCACAG GATTGTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACTTGG AACTAAGGGA
AAGCCCGCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG
CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC
TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT
CCCTATGCAC TGGG

SEO ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA
AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA
TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCCTCTA
TGTAGATTTT TATTTATTTC TGAGGGCAAC CCAACTTCCA GGCTCTTGGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT
CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACTAAA ATGTACACTT TTACATTTTT

SEO ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATITAC AATTTACAC CITCAGGAAG GCICCAAAAT ATAAACACIG TACCICICCC TAGAGAAAAA AAAATTATIC
TTCTCTTCAA AAACAGGAAT ACAITCATIT TITCTCACIG TGIGAATCAA GIAATTATAC AAATAAACAT CIGAAACATT
TTCCTTTTTA ATATATTAT ATAATATATA TITINTAACAG CITTACAAAT AAAGGCAACG GICCTTTTCT AATTTTCATG
CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATTCCAG GGNIATTTTT TNCTCTCTAT GGIACTTTGT ATTTCACTTT
ACTT

SEO ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCIG AGITTIGITT GAGCATCITT CAACATGIAC CATATTTATG ACAATTCTCT TCCATAGGAT CTATCTGINC TGCAACAAGI ATTGATCTTA CAGIAAAATT TTTCACAAAT TCATTAGATT CTATGICTCT TTTTCTGGIA GGAATTTTTG TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTGCTGA TTCTTAAACT GGCCTCTAGA TTTCCAGATT TCTTCCGGTA CAGACTTTCT CTTTGCAAGI NCTTCCATCT CTAATCTTTG AGATTAATCT TCTTTTGAAA TGTCCTGCTG CTCTACTCTT GTATGICTTG GNCCCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GITTATIGCI CAAAAACAAG AATICAGAAG CAAAGGIGGA GAGACIGIGG GITGGGGAGA TGGCAGGAAG GGGGCAAGGC
CITGICCCAG CICICCCCIT TGICCIICIT CIGACCCICC TGGCCGGAGI CAGGCCIAGG GCCAGGGCAT CIGGGAGGGG
GGCACCTICG TGGCCAAGGG AACAGIAGAG CIATCGGGGG CAGTCCITGA GGGGIGCCCI GGGCAGGAGG GGCIGCAAGA
TITNCAGGGA GGCAGAGTIC CCCTCCCAGA ATCCAAAAGC CGGIAGGGCG GGGGGCAAGG CCCCTCGITT GGCAACINAG
AAGAGGCGGC TITTGGGCG

SEO ID NO:402: (Length of Sequence = 400 Nucleotides)

TGICCAGIGI ATGAGGACGI CCCAGCGAGA AATGAAAGGI TCIATGIITA TGAAAATAAA AAGGAAGCAT TGCAAGCIGI CAAGATGATC AAAGGGTCCC GATTIAAAGC TTTTTCTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT ATTTCCCTTC TCCAAGCAAA ACGICCTTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA GATGGTTTGT GCTTGTCGGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT CACCGCCAAG CTTTCCGGAAA AGCTGTMGAG GAAAGGGAGG AGGAGGACAN CTTTTCTGGC CTTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTIGACIGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGITAGG
GCATTITGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG
AATACTCTTT NCTGTGTCTC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG
TTGGGTTTTG TTTTGTTTTT CAAACAGTAA CTTTTATTTG ATTGTAAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG
TCTTAAGGTT GATTTT

SEO ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCINACIC ATTGTGATGA GTAGGGCGGA GGGCITCACT GCCTCANTIT CCCCAACTIT GGACCTTAAA TCCTCTCCTG
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTTAA CAGATGCAGG ACACACAGCC TTGTCCTCAG
ACCCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTCGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG
TGTGTGCTGA GGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT
AGGGGAGGCC CAGAGGAAGG GTAAATAGTT TGCCTGGGGG GGTGCTGG

SEO ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGICCI CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT

ACAAAGATTC TCTGCAGACA AAACCAGCTA GCCAAGGTTC CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA

AATATGTACC CGGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCATT

TGAACAATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGGAATTCTT

TATTTAGTAA TGTCCTAACA TAAAAGTTC ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCITAA TCIAAATITI ATCIIAATIT TIATITITAT TICATIGICI AAATITITAT CIAAAATITI INCIAGCICI
TIATIACACC AAGACAGCIT CACATITITA TITATATATI GIACATCICA TGIAAGGNAT TACCGIATAT AAGCIAGIGI
CATAACITAA GIAGCCACAT TCATICAGIA TGITTIATGI TITCTCTCTG ACTGGATCTC TGATACATTC TITCCTGITC
TAGCTGCTTT TATGCAAAAG GGCATTATAT GITTGICAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGIAAA
TATATAATCC MGTGGCCTGT TTCACTTTGG CCATGTTT

SEO ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGIGIATAT TIAGIATCIT TNATTAAGAA GACIGGITGA TATITGCCIT CAGCIAATIT ATAGAAAGGA TGATCATCAA
TGICICIAGI TITCITCIAA GIGGCITGIC TGIGCAGGIA CATATAAAAA INCAACIATA CAAATAGCIG GACAGITGAG
TCTCAACTAT GAAAATCITT TCIGGGATCA AGATCIAAGA AGITGGIGIG TGIATGAGIG CAACCCATCA TTCIATCCCC
TAAAAATCIG GGGITTCICA GCCCAAACAT TCNCACIAGI AAAGICAAGI TICA

SEO ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCITTA AATTGAAAGG TTAATTTCCT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCCTC
CAATCITTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGTNCCTTTT TTTTTCTCAT
TATACTCTTA AATTGTTGTC AGTTATCAAA CAAACAAACA GANAAATTGT TTGGAAAAAC CTTGCATACG CCTTTTCCTA
TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

SEO ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCTCATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACTCAC TGCAGCCTTG AACTCCTGGA CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCCAGCTA ATTTCTAAAT TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAACTC CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC
ATGGCAGTAG AACAAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA
CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC
TAGAAAGGTG TCCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAGA CCATTAACTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG
GAGGCCAGTG TACATGTAAA TGCCCACAGC CCAGCATTGG GTTTCCCTCC CAAGGNCCCA GCACCAACCT CTGAGCCCAA
GACCTTGCCT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCACTNGGG
GGAGGGGGGA AGGTGAATTA TGGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEO ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGIGOGCA CIATCACGCC CGGATAATIT TITTIGITT TAGTAGAGAC GGGGITTCAA CATGCIGCIC AGGCIGGICT CAACTACCGA CCICGIGATC CGICCACCGC GGCCICCCAA AGIGCIGGGA TCACAGGCGI GAGCACCNCI CCIGGNCACA GGINGAGACC CITTICTATAT AAGAAAGAGA AAAATGICTC TNANICACAA GAGAATGCIA ACAACGGGG AAAGCACAGA CACAAACCIG

SEO ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTEGGAC AAGGGAAGGC AATCACAAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTC TCTTCGGGGG
AACCAATGCC ACCCNCCTCC ATCCCCCAGA CGGGCGAGGG GCTGCACCCT TAAAGCAGGC CATTGGGCCT TCCGGGCTCC
AGGGCCAGCC CACCCCCATC CCGCTGGTGG ATCTTCTGGT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA
CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCCGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC
CACAAGTAAC CACAGAT

SEO ID NO:414: (Length of Sequence = 304 Nucleotides)

GETTTAAGAA CTGCETTTTG GAGCCCAATC TITGGTGAAA AATATTTTTG GETCATCTTT GAAAAAAAATC CTTTTCAAGG CAGACAGCAT TITAATGCTT TGTCTGTTTT TCCCTGTTTG TCAGCTCTGN CACCAGCCTG AAAGATTTAA AAATNCAAAT TAATGGAGGN TTATTTGTCC TNIACTCAGG TCACATTTCT GGGTTTTAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEO ID NO:415: (Length of Sequence = 315 Nucleotides)

CGITGIGGAG TGGGIGICIT TGGATAGAAG GAGIGAGGAA CIGGGGGAGG AAGGCCIGGG GGATCCCCIG GCGGGGCIAC TTCCIGGGCC CGGAIAGGAC ACCIGGAGGC TGCIGCGNIT GITGGGGICC TGGCAGGGGI GIGGIGIGGC CCICACCACT CICNICACCI GCTCCITCCI NACAGIGCCI GGAGAAGITC CCIGINATCC AGCACTITCA AAGITCGGNA GCCINCIGCC CATCCATCCI GICACGICGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNCACANT TCCIGIGCCT GCCIT

SEO ID NO:416: (Length of Sequence = 343 Mucleotides)

GIATTICAG TGITTATTI GCITTCIGIG GIGICAAATT TGGGGICICC TAGAGCCCAG CCCCAGGCAG AATCCGGCAT
ATCCTTCICC GCCIGGGGG CCCGGGACAC AGGAGITICA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA
GAAGCCACAC TGAGCCIGGA GGGACCGGGC CCICCTTCGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTI
NCCTAGAAAG AAATTIAAGA CAAGATAAAA ACCTGAGATG TIAGAGGAGC CCCCAGAACC AAGCCGGIGC TNCCCTGGGC
AANCAGAGAG TGAACTCGGC TIT

SEO ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGGG GAAAATAAAA GGAATAAAAT AAAAACGGCA CAGTTGACAC ACAAAAAAAA ACCAATGATG GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTNACCCGG GATGCTCACA TCTNTCCCTN ACGTGGGGGG TGTAGCCCCT TCCTCCCAAG GT

SEO ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAGITEG CIGCAGAGCT GICTICAGGA TCATAGGCCA CIGCCAGAGT CITGGAGAGA GGGAGGAAGG GAGAGGAAGG GAGTGAGCT CGGTGGTCTG ATTICTGGCT CAACGACGCA GGAACCTCAG GITCAAAAGC AGCTGACAAG AGCCCAGAGA CCCGTCTTCTT GGCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCCAGGCA NGGAGGGAAG GCCCTGAAAT CCCGTTTTIN TGGCAAGATT NGITTCCAAG AGGAGATAAT GGCTCAATTT TGTCTTCCCCA AGTTGATCA

SEO ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGITGGGA AGGIAACATT TITCCATGGI TITNATTTIN CCCAAAAGIA TITATGIATT GATTTATTIG GNICTGACTC
AGGCGACGIA CIGIAAGACG ATATTACTIT AATCATCITC ACATCAGIAT TIATGGAATA GCCACAGGIG CCICATCCIT
TAGIAGGAGI TAATTATACA TITNCIGGCC GAGIAAACAT NICCGAATGG TATGIATGIA TIT

SEO ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTIGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTIG
ATGAGTTIGG GAAAAGTTCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT
AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTTG AGCTTAGATA CAAATCCTTC TTGTCCTGAA CTGATAGGGT
AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT
AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTTAGGTT
AGGTCC

SEO ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CREACTIGIA CACAARGGAC CATATGINCT GICCAAAATA CACCTACATT ACACTGIGIG GAACANGAAC CREGGCTTIG CAAAAAAGAA TITATGATTA AAATGIAACC CCCCCCAAAA AAAAATGAAG CITAGAATTA AAGGIAGCCT TITACCCAGA TITGITCACCA GNITGIAAAA TICIAATATG GGICATTAAC TGITCACAAA TAATTCATAT TIGGNCITAT GGITTAAGGG CICCAGATIG AAAAGGIGCT CIGAACTTCT G

SEO ID NO:422: (Length of Sequence = 220 Nucleotides)

SEO ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGICTCITA TCTGGGCAG CITTAGACAT ACTAGCTTGG TTGGAAACTG ATATTAAAAG CCTAAAACAT GTAACTITNC
TTATCAGGIT ACTATCATGG GGAACTAAAG ATTCCTGGIT TTTTGTATGI NCCATAACTA TACTTTAGIA AGCCCTGATA
TACGGTGITA ATTTTCCINC AGTGAAGGAA ACATGAAGAT ATATTTATGI GCACACATAC ATATATATGI ATATATAACG
TATATTCAAA CATGCACTCA GAGGAAGTTA GGGAGAGAG TTTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGI
GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGIGC TATGGTATAC A

SEO ID NO:424: (Length of Sequence = 379 Nucleotides)

TEGEGRACCT GAGGCATGAG AATCECTTGA GCCCTGENEG TEGAGGTTGC AGTGAGCTGA GACCCCGTCA CTGAACTCCA
GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAAACANACA AACAAAAAAG CCTATTATAA AACAATAGGA
AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAAAATTAT CATGTACATT CCACTACATG
TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG
CTGCTTATAT TTATTTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCCTGGGGT CTGGAGATGG GGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC
CCACGTTCCT GGTCTGCAGT GCTGCCTCT CCCCAGCACC CCTGGGGCAC AGAGGGCAG GTCACAGCTG GGAAGAGGTG
GGGGGTAGAA ACCAAGGCTG GCAGAAGTINI AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACTTAC
TGTACCCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG
TAAGATTCAG TCTCTGGGTG AGTACCCAGT TNCTGGCTTC TAGATGGCGC CTTTTTCCCT GTGTGTCCTC AAATGATTGG
ATGAGGCCAG GGTGCTCTCT TGGAGTCCTT TCTGTAAGGG CAACTGAT

SEO ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCIGENTCA TOGCIGICCT TTCCTCCTIG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCCT GAGGACCTTG GTGTGTTTCC TCCTCTCCTA GTCTCCAGAC COCAGCCTGT TCATTCCTGA GCTTCCTCTG GCACCCCTTC CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGCCCGGGG AGTGCCAGGG GCAGTCCTCA TACCATCCTC CCACTGGCTT CCCTCCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC TCNCCAGTGA GCCAGACAAG GAGGCCCACT GGCAGAGGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG GTGGAGACAT GGCTCAA

SEO ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCCIGICT CTACTAAAAA TACAAAAAAT TAGCIGGGCG TGGIGGIGGG CGCCIGIAGT CCCAGCTACT CGGGAGGCTG
AGGCAGGAGA ATGGIGTGAA CCCAGGAGGC GGANTIGCAG TGAGCCGAGA TAGTGCCTCT GCACTCCAGC CTGGGTGACA
GAGCGAGACT CCGTCTCAAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTTCTTAC GTTTTCCTTT
TTTCCTTCCT CTCCACCCCA CAAGTTTTGC TTTTTAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

s.

<u>SEO ID NO:429:</u> (Length of Sequence = 422 Nucleotides)

GAGGETTIGGA GACAGGAGAC AGTIGGGTTGG GAAATCCAAA TCTCAACTIGC TTTTGTACTG TCTCCTGCTC COGAGTGCCC
CANAGCCCAT GCAGACCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTITCTCTA CCATCCCTGC AACTIGGGGTT
CACTGTIGGAG CAAACCAGIT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TNTCATTCAA GGCATTTCCC
ACCTCTNITC TCCACTCATA TCCCTTCCCA AACTIGCCTTT CCTCATTTCT CCGTCTCCAG GGAGAGGGAC TNCAGGCTAC
CACAGNCAAA AATGGTGGTC TTCAGTCCTA OGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG
GACACACAGA NGTGGATGCC AG

SEO ID NO:430: (Length of Sequence = 332 Nucleotides)

COCCENTAGE ACCORDENCE COECCACOCC COACCIGCAG GGGNIGGGGI COCCGGGGG CINGOGCCIC GGGGTCICCC
GGNAGINICC CGICCAGCOG TOGAGCAGGG TGCTIGANIN INICIGCAGA AAAGACTCIA GGACCCCGCC ACCATGITCC
CCGAGGCCCCC AACCOCCGGG CCICCATCGC COCGANACGCC TCCCGACTCC AGTCGCATCA GCCACGGCCC AGTGCCCCCC
TCGGCCCCTGG NCACCATCGT GCTGGTCINA GGCCTCCINA TCTTCAGCTG CTGTTTCTGT CTCTACCGGA AGAGCTGTCG
GAGGCGGACA GG

· SEO ID NO:431: (Length of Sequence = 413 Nucleotides)

TGICATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA
GGIAGTACAG GGCCAATAAC AGATTITIGG AATTITICAA ATTICICITT GAAGTAATIT TACAGTCAGI AAATGGAAGT
GGAAAAGAGG AATAGAAGAG CATTICATTG ATTITITITT TCTCTTGTAC TTACACATCT CATGACCTCA TGTTCCCAGA
ACTIAACACT TAGITGGGTT CTAGIAGATA TTTTGGGTTG AAAAGATGTT TGCTGTTTTG CATTITGTTC TGTTTTGTTG
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACTTCAA
TAACATATCC CAG

SEO ID NO:432: (Length of Sequence = 292 Nucleotides)

TTCACCETET TAGCCAGGAC GETCTCGATC TCCTGACCTT GIGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGTATTAC
AGCCGTGAGC ACCGCGCCCG GCCACCATTC ACTAATTTTC AAGAAATGTG GAAGTGTTCT ATATTINCTT CCCACTCCAT
AGCTCCAACA TTGTTGGCTA TTATGAATTT GGCTATTAAG TGATGCCAAC AATATTTAAT GAAAAAAAGA TATAGCAGTA
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGTG AGGAAAAAGGC CC

SEO ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTTCTC ASCAGAGGAT TTTATTGGTG GICACCTGTG GCACAGGTTA GAGGAGCCGA AGTGCTGINT TTGTGGTGGG
GGGGGGACCA CAAACCCCGG CCCTGCCCTC TTGCTTACAT AGGCTTCCGG CCTAGAAGCG CANCATGAAC ATGCCGCTAC
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTTNGA
GCAGATCTCA CGTACCACAC TGGCATCCAC CTCCGCAAAT CCGGCTTTCC CATTCAGCCA GGGGGGNATG CGGGNGGGCC
ATAGGTCAGG AGGCT

SEO ID NO:434: (Length of Sequence = 390 Nucleotides)

GITGCIGACI GCIGATIGGA GATGACGIGI ACCCATCCIC TAGACAGICI GIGCITITCC TGICITIGGA GCITCCAGIT
CCACCCCCAT CAGITITITI CIGACCACIC CAICITGCCI TAITICICIC TCITICCITI TGACTGGAAG AGIACICATC
TTITICIAACA TCITITCATA AACIGITTIG AITICACITA TATIGATTIT NAACGIATAA TGIGCIGGIG TICIATITCC
TCAGITAGAT CAGAAGGCCC CTAAAGACAG GGCTCCATIG GIGITAAACT GCCATCITCA AGGICIGGGA CTIGATITCN

ATTAAAATGA TATTGACAGT AGACTAG

CTITITINAC CINCACAACA AGGCACTCCT CTTGCACCCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEO ID NO:435: (Length of Sequence = 427 Nucleotides)

TCACTAAACA GTAGATITAT TITATGTAGA TITGTTITC TATAAAAATA TATTTATGTG TICACAGGAA AAAAGTTGAG

TTGGTATGTG GGGGTGACIT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCIT AGCTTTTATC

ATTTTCAAAT TITTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT

TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT

TTGGATTTTC CCAACCCTTG GACAGTTCTC TAGGGACTCA TGCCCACCAA CCATTCTTGA GACTATATAC AATCAATTAC

SEO ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC ACCAGGGGG CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTTNTAG ACACAGAACA AAGAATCAGA
ATTTGAAAAA AGANGAAAAA CAAATCTNOG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGG ATTTCCATTA
TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTGCAGT CTNGTATTTG TGGTGGCCAT
GTGGTGAGT

SEO ID NO:437: (Length of Sequence = 404 Nucleotides)

GICATTCACC CTAATCCCTC THICACCITC ACAGAACITI CACACTCCAA TGIACTIGCT GITTGIAGAT GCICCTATAA
ACAGAAAGCT CIGGGAGACA GGIGICITGI TATTCITGCT CICTGICATA TCICTGGGCC TATCACAAGT ACTCAAAGCA
TAGAAGITCA ATAAATATGI GITCAATGIA AGAAATGATC AGIGATTCTC AAGCIGCAGT GGCGTCAGGA TAACCTAGAC
AGCCTGITAG CACGGNICAC TGNNCCCAC CCCCACAGIT TCAGGICIGG TCIGGGNIGG GGCCCAATAA TCIGTATTCC
TAAAAGTCCC CAAGCAATGC TGGTGCTGIT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA
AAGG

SEO ID NO:438: (Length of Sequence = 337 Nucleotides)

CIGCAACITA TACCITCCAT TIACTAAAGI CCCAGIATGI GICAAAGIAG TITICATICC TCACAGCCAT GITATGAGCI
AAATATCACT AACITICCCI TICAAAGGIG AAATAAACIG AGACTCICGA AGATTAACII GCCCAAGGIC ACCIAGCICG
TIAGGAGGCA CAGGIGGGAC TIGAACCCAG TICITICIGA ATICAAAACC TCCAAAATGI CIGICACATC AAGCIGCTIC
AATGAGATGC TAGAAAATCA GGACAGIGAG CAAGCIGGAG ATAANGGAAG ATATGGAGGA ACACGGGAAG TGIGATCCIC
ACACACATAC CCTGCAG

SEO ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGIGIAT GAAGGIAGCC ATTITGIACA TGITACCTIG TIAAAAACAA AAGAGCAGCA ACATGITIAG AGIGGIGICT
ATAGATAGAA CACIGCIGIT ATGITTAAGG AAAATIGGGG CGGGGCAGA AAAGATCAAT ATGACTAGIT AGAAGACIAT
TAAGGAGAAC TITGIACATG AATTATGGAT GIAAGAATTA GAAAAAAAA GATGATCATG TICAGAATTI TAGCTTTTIT
ACAATTGIAG TGGAAAAGAA AACTCCTAGA GIAATGAATC AATGGTATCC TACAAAAAGA GAGGIGCCAA AAATACCATG
AAATATTATA TTAAAAAATT CACACGNATA GGIAGITATA ATATGTAAAG GCCAGACTTC

SEO ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GIGGACIGIG ACTITICATE TAATTITATT TITGAGAGAG GGTCTTGCTC TGTCACCCAG

GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCCTCACGG GCTCCAGTGA TTCTCCTGCC TCAGCCTCCC

GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTA TGTCTGTGGA GACAGGGTTT

CACCATGTTG CCCAGGCTGG TCTCAAACTC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT GAGCCACCAT AATAA

SEO ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATTGTG TITCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTTGGTC TGTAATTGGT TCTGGCATGT TTATAGGTAT
TACAAAAACCA AGTCTTATTT TGCATTTCAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC
AAATTATACT CCCATCGCGG ATGGTGGCGT CCCAGGCCTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGCGCTCC
CGGTGCTTCA ACGAGGAGCC CCTGACGCTG GCGGGCTTTC AGCAGGGNCC CGGCCAACCT CAGTGACGTG GTGCAGCTCA
TCTTTCTGGGG TGGGACTCCC AATCCCCTTT CCCTTT

SEO ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTITG TATCTITITC TATTIATIGA GATAATCAAA TGATTITIGI CCTTCGITCT ATTGATGIGA TGITTATTGA
TCATGITTAT TGATTIGCAT ATGGIGAGCC ATCCTTGIAT TCCTGGIATA AATGCCACCT GATCATGGIA TAINATCITT
TINATGIGCT ATTGGATTIG GITTGCCAGT ATTTTGITGA GAATTITTTC ATCTGIGTCT ATTACGGATA TTGGCCTGIA
GITTTTTTTG CTGTGTTCTT CTTTGGTTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGINAGGGA GGAGTTATCT
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGIG TTTTAGAACA G

SEO ID NO:443: (Length of Sequence = 329 Nucleotides)

TEAACTECCT TTATTTTTIN ATTTCCCATC CAGAAACCCC AGTGTGATGG TEGAAGCAGC ATGAAAACAA CATCTCCCCA
GECCTCGCAG TAGAGGCGAA GGGAACAGAG CTGCCCATGT GCCTGINTCT AAAGACGCCA CCCTCAGGIT GATGTCACCT
GTGGGAGACC GGGTCCACCT ACAGACACCA GGTGATGGTC CACCAGGCCC CAAGCTCCAG CCTGCTGAGT CCCCAAGACA
CAGGCTCATT AAATAGCTTC GTACAAAAAAC CCAAGGGTGT CCCTCCAGCT GGTAAAAAAAT TGGGCAATTT CTACTTGGAG
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTA AGIACATAGG TCTTTATTIA AACACTGAT TTTTTTTTAA ATATATACAC ACAAAACTTA GTTCAGCAAG
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCCTTT TATCATCTGC
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCCAGA NGAGCTGCCG CCTCCTGGCA
CAGCAAACGC TCCAGGCCTG GGCCCTGTTC ATATCTGGAG TCGGAGGGAG ACTCCCATCG GCCGCTTTGG GACTGAAAGG
CCCAAGGCTG TCACCAGGTC CCGGAAGAGA GGGAGGCA

SEO ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGT GAGAAATAAA TIGCIGITGI TIATAAAGTA ACCIGITIAT GITATTITIT TATAGAAGCC TGATCAGAAT AAGACAATAT TGGATAGAAT ATTCAGGAAT GICTIGCCTC CAATGITGGC CCCCCIGIAC TGAGCICTAA TCTACACTCA CCTAAAAAAAT TATAAAATCA TAATAAAACT GAAAAAGTCA AACTCTCAAT TGCATCCCAG CACAAATATC ACAGNIGNIT ATTIAAAAAA TTATGICAAG GCCCTAAAAA GCTAAAATCC NCAGNICIGC TAATATTICT CT

SEO ID NO:446: (Length of Sequence = 367 Nucleotides)

 TTACTICAGI AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT CTCCTAGGGN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEO ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAACCC TTCAGCATTI AGCTAAAGTI ATTTCACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAAACTG
GTATCTCTTC AATAGCAAAT AGTATCATAA CAGACCACTA AATTTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA
TTAAAATTGG TGTAAATCAC AGGGTACAGA ATTCTTATCT GGTAAGAATT CTGACTTTTT TTTTAAAGAA GAAAAAAATAT
ATCCAGATCT GTATCCACAT GCTATTTAAA TGCTCAGGNC AAAAAGAAGC CACTA

SEO ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCCC ATCAATCAAC TGTGCATAAA GAAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA AAAATACAAA AAACTTAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTTGA TGACCATGCC ATCTTCTAAT CCCCAGAAAA AAACTGGAAA ACAGAATAAA TATAATTTNC TGATTATNCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEO ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTICCTICC TCAGGCTCCI GIACCAATCI TCAATTCACI TGGGATGTCC TAGTCIAAAA CATTIATTTC ATTTGAAAGG
AAAAATATCA ATTTCIATCI AAATTGGAGI AAGATCAAT TCAGATGTGI TTATTTACAA AACATAAGIT TGTTATTTAT
CTGTGTTTAA TTTGATCCNG GAACATTACA TGTAAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG
GCTCACACCT GNTAACCCCA GCACTTTTGG GAGGGCCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGTTC AAGACCCAGC
CTGGGGCCAAA TATTGGCGAA A

SEO ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGTIT CCAGTCCIGG AAACCTTTAG CTAATCTTTA GCATTCCITC AATGGTGGGA ATGGGCAACA
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAATGGTTAA TTTCCATATC ATAGTAGAGC TGTTGCAGAT
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GOGCCOGCTC CTGGGCACCC ACCCAGCTCA TTGGCCGAGC GGCTCCCCTC CTGGGGTTGA GTGTCCTGGG CCTGAGTCTG
CAGCCTCAGC CATCTGTTCC CCAACTTGAT CTCCCACTGC TAGTTACAAA CAAATCGCCC GGCTTGTGCA AACCTCCTGG
GCTCAGTCCC CAGTCCCGCG GGGCATCATT TCATTCTTTC CTAGCCTGTA AGGTTTCTCC TGAAAAAATCT ATTGTTAGTC
TAATATGAAT TTCCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTTT AAAATTTTCT CTTTTGTCTT TGACTTTGAC
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEO ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCTTGCT TTACCTATG ACTGGCTTAA GCCGTGTGC ATCCGAGGAA TGITTCAAAT GIGTCTGTGT
TTCTCTTTAC ATTCCTTATT GTACCTCATT GITCAATTCA CTTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT
CTCCGTCATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTTGTTTA TAACAGCATA GGATTATAAA CAACCTAAAG
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAAATA ATAANGAAGA TCCTGCTCTG
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GGG

SEO ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GINCCCTTIA CTGCTGCAC CGCCAAGCGT
GGCTCTCGGT TTINCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT
AAAAGATCTT AGAAACCAAC CATACAGACG AGCCGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT
TGCGTTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG
AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCTNCCC ATTTGGGCCA ACTTTTCCTG GG

SEO ID NO:454: (Length of Sequence = 391 Nucleotides)

SEO ID NO:455: (Length of Sequence = 282 Nucleotides)

TIGAGIACTO ATTIGAGGAC TGCAGICATA GATTIAAAGT GIAATCAGTO AACTCAGIGG AATTACITIC TCCATTAATC
TTAAATTGCT TCAGGACTGT TTCAGCCIAA GCCAGIAGCT GGGTTTAACC AAATTIGAAG ATTITINCTAG GAGAGITIGG
CAACGAGGAGA GAGGGCCAAA GGCGIGIAAG GCAGIGITTA TAACAGIGGC CCATGGAATT GATCATGGGT AAAGAGAAAA
CAAGGACATG CGAGGAGGIG ATAAATAGAN CAAAACAAAG CA

. <u>SEO ID NO:456:</u> (Length of Sequence = 340 Nucleotides)

CTAACTTATE TITEAGATCT TCAATGAAAT TAGITACTAA TATTINGCIT TATTCTICIC AAAAGATTTA ACATGATAAT
TCTGACCTAA TCCAAAAAAA AAAAATTCAT GGGCCACTGT TITGCATGTA ATATGTAAGA NCTCACCTTG ATGITAAACT
CCAACCCTTG GCTGAAACAG GITAATGATC ATTTGINGIT ATTTATTTCT ATAAATAGIT TGAAGTTGGC CAGGCCTGGT
GGCGTCTCGC TGTGTCTCCC AGGGTTGGAG TTCGGTGGCG CAAATCTCGG CTTCACTGCA AGCTTCCGCC TCCCCGGGGT
TCACACCATT CTTCCTGCCT

<u>SEO ID NO:457:</u> (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTTGC
CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTGCATGC CACGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC
GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT
TGCCAGCTGC TGCTGAGTCA CAGATTTCAT TATAAATAGC CTCCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA
CCATTCTATT TTTATAGG

SEO ID NO:458: (Length of Sequence = 370 Nucleotides)

GITTICITIC GGAGCIGAAC CAAAGAATGI GCACCCICIT TCICIAGIGC TGIGGIGICT GCITATITIT GIATITGIGC
TTICCATCCA TCITCIGIGA TCACAAGGCA TTCITAAGGI TTICIAGCAC GACTIGCGGA CATCCAGACT CGIGGGGGGC
CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCACTGCAT TAAITGCTGC ATACAGCTGT
TACCCGACGG CGCACACAAG CAGCAGGICA ACTGCCAAGG GGGCCCCCAT CACGGICACC AGGCGIGCCC CACGTTGCAA
AGGAGGAAAA ACAAAATTCC TGGTTTCCGT GTGGGACAGT AAAGCAGATG

SEO ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTITICCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTITTC ATCAGAGCCC AAGGGAGAGGGG GGCCAGGGTA AAAGAGACCA GACTGTAGAG AGACCAGTAG GAAGAGGGTG GGAGAGGGCA CTTATTTCTC TCTGTCCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTNGA TGAGAAATGA CACTGGAAGG AACATCAAAG CCGGAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGGAGCCT CCCAGTGCAC CTCAGAAAT

SEO ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCITITICO ACTOCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA
GIGAAAGGGA ACCAGGCTCT ACCACTIGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAAACT ACCACTIGGCA
ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTTGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA
TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA
CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTGCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GICATTAAGA AGCCITTATT GGGITATATT CAATITGACC TCCCACCAAA TTAAGCGGGA AAAAACAAAA AAATAAGAAA TCCCAGTAAA AGAGCCCCTC AAGATTTCAT AAACTACAAA CTAAAGCTGC TAGITAATAA GGAAATGGCA GAATTTTCAG AGCTGTATAA TACAAAAAATT CCTGTAATTT AAGCAGATGT TTTCCTCACT GATGACAAAT CTTCCAACAC AATGTGAAGT TATGCTACIT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAAA ACAAAAGCAA GGGACCNTGG AAAAAAA

SEO ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCCTCGTGGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAAACAAAA ATATGTNAGT TAACACAGAG TGTTGGAGGG TGTCAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA AGAGCAGTT CTGGAAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC AGAGGAAGAC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTTCTTCT GAGGGTCCGC TGCTGGCAGT
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCCGCCCCAC CCGGCCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG
CAAGGTTACG TTATATATAG GATTCGTGTT CGCCGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA
GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTTGCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACCACACT
GTGGGGCTCT TGAGAGTCCT GAATTCTTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTTGA

SEO ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GGCTGTGGGC GTCGCCTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG
AGGCAGGGAG CCGGGGAAGT GGGGTGGGGT CGCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT
CAGGCTGTCA CTCTTAATCA TCATGTCACT ATCTCTGGGG CGTGTCAGTC ACCATCAACG ACGTGTCCCC CAAGCTGCAG
AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTTGGCCCT CTCCACATGG GCTTNAGGGT CAAGGGTTGG GGGCACGTTC
GGACCGACCT TCCTGNCTCT TINGAAGAAG ATCCTCCAAN GTNCCCGGCT TCAGCTTCTT CCGGGCCTCT TTTGGCA

SEO ID NO:465: (Length of Sequence = 320 Nucleotides)

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SEO ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGUATTI CCCUTCITCA AATUAATIAC CUACCAAAAA AUGAAAAGA ATTUTACATG CACUTTAAAA TAGUAAAATG
GAAAGIGAAT TUTTAAAATA TAUCCATUAA AAGUTTACTI TAATTUCCAG TGGGACTICC TUTATGAAAT TUTCCATAAC
CUCTUCCIGG AGUATTACAA GAUCTCCAAC AUCTCATAAA CUAATUGIGA TATUAGIGGA ACCATAAGCA AATGUATATI
TUTAGIGGAA AUGAATTATG AAUGAAAGCC AAGCACCITA CUTTAAAGCC AAAATAUGAG AUTUTCCATT AAAAACCATT
GGTCCATAAT AGGGAGGGG GUTTUTTAAT TU

SEO ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT
GTTTGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT
CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACAACGNCA
AAGCGTTAGG GATCAAAAAC ACTGTAACAA AAATTAAGAN TCCCTTTTAT GGGCTINTTA ATAGNCTNGG ATACAGGTAA
GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEO ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA
CATTATCATT GTAGAAGTCT TGTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATTCTT
GAGGAAGCAT CTGCCTCGTA GCTCTTTATC TTTCTATTTC CTACTACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT
AGGTGTATAA ATTCTCAATA AATATTTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTTAACTCA TCCTGAGGTA
CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGIA GAATICIGIC TGGAGACGIT CICCCCITCA ATICAATGGG AAGGNICITT TCIGGCATGA NCICTCCGAT GICTAATGAG CICTGAGCAC CATCCATAAG CITINNCACA TICTITANAT ATAAAAGGIT TCICTCCACT GIGAAT

SEO ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTICAC ACGCACAAGT CTGAAATGTG AAGGTTTCTT AATGTTGGTT TTATGGTTCG TGTAAGATTT
TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT
TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTTGAA TTTCTAGCAA ATGGTTTTCA ACTACTTTAA ATATGACCNA
CTTGAAAAGTA TTATTCCTNT TTTAAAACTA CTTTTNATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT
TTGAGAAAATA AAGGCAAGAT INTINCNITA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

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GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTTNGGAG TCACAAATAT AAAGATGTAT GACTTNATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC AAGCCCCCGAA GCATTCTAAT GTTTACAGCT <u>SEO ID NO:473:</u> (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CITAAAATTA AACTTTAGCA ACAAAGTITA ACATTCAAAC
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAATTIG TTGTCTAATC CAGAATATTG ATAAAGATCA CITAATGGTG
AATAAAATAT GTTTAACCAG TGGTTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA
CTACATAAAT CTTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGCNTAA TCAAAGCACG TAAGGGTACC
AAAATAAAAC TAATCTGATC TTTAG

SEO ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGGAAT TCTGTCCTAG GAGACAGTGA GINCTAAGTA CACTCTGGAC AAGCACCAGA
CACAGAAGCT GCCTCAGTTT GTGCTCCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTTGG GTACAAGGAG TTTCACTCAA
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCATCCA TTTTACTGCT TTATACTTTC CATTAGGTGA
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTTGTT CTCTTATTTG TTAAATAATTA TAAACTCCAA GCCCATTGTG
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCCT GGGGGACAAT AATACTNTTC TCCCATCAAT GGCAGATGTN
GGGCTTGTNA CATTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATEGITI GIGIGCOCAC CCAAATCICA TCTAGAACTG TAGITICCAT AATCCCCACG TCGIGGANGG GACCIGGIGG
GAGGIAATCG AACCATGGGG GIGGITACCI CCATGCIGIC CITATGATGG TGAGITCICA TGAGATCIGA TGGITITATA
AGGGACITIT CCCCCCITIG CICTGCACIT TICCATGCIG CCACCACGIG AAGAAGGATG TGITIGCITC TCCITCCACC
ATGATTIAAG TITICINAGG CCICTCCAGC CATGCIGAAC TGIGAGICAA TTAAACCICT TICCITTAAA AATTACCCAG
TCCCAGGNAT GICTTCATTA GCAACCICAG AGCAGATTAG NCACAATTCC ACAACTTGGA GAAINGGIGT TCAAGITTCA
CTCTGGCCIT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

COCCECTAGE GCGGCNEGGG GTCGGGACGC CGGGCTAGGG GCGCGTCATG TGGCCGCTCA CGGTCCCGCC GNCGCTGCTG
CTGCTGCTGT GCTCAGGCCT GGCCGGACAG ACTCTCTTCC AGAACCCAGA AGAGGCTGG CAGCTGTACA CCTCAGCCCA
GGCCCCTNAC GGGAAATGCA TCTNCACGGC CGTNATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG
TATGTACGCG GCATGGAGAC CCTCATTCGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GETCTCACTC CETCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAACTC ACTGCAACCT CCGCTCCCGG TTTGAGTGAT
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCCAGCTG GGATATAGAA TCTAAGAGTT
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGCAGCTG
GAGATGAACT TTTAAAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAAACAGCT NTGCATGGCA
GGCCCGGCAA TAG

SEO ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGITAAA ATAAGGTAAT ATGAAATAAT CTAAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATITA
AAAAAATAGC TACAATTITA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTTAATGT ACTGACCTTT
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCTTC CCTGTGCCTC ACCAGGGCCC ACCCCAAGTC
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTTGAATCCC TTTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

GCAGACCACC CTACATNCTC CTGIGTGTGG GGACACTGTC AGENTGTCCT CCCTGCATTA GNCTCTGCTG AGTTTCCTAC CATGTGNCCA GGATGGNGTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEO ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGIATC INCTITIAGA AAAACACITC TICAAAATCC TACACTATGA AAAACIGTCI TCAGGAATIG TITATITGGI CCGITGATCI AGIGAGGCIG AGITCITAAA TCITICACCC CCAAGITAAA AATTGGAGCA ACAAAACAAA ACTCCAGCAA GGCATAAATA AGATATTAAA GIGCATATAT ACAATACCAG AAAAGITTAG ATTGGGAACA GCAAAAATTT CIAGIGCAAA AACIGCITTI GCCAGCAAAG CICCCTCTCI GGAATCAAAG GGCTACAGTA AAAGITAAAA TIGGAACAGG NITAAGCAAT GTCIGTCTIT AGICACAAGI NAATATATGI GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

SEO ID NO:481: (Length of Sequence = 369 Nucleotides)

CCIGGGCAAA GCATTGATCT GGIAGCCITG CTCCAGAAGC CTGITCCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA
AACTTCCCAA CAGCAGGGCT TTGGCCCAAGC CCTTGINITC ACAAATTCGC AACACAACAA TCAGATGGCA CCAGGGACTG
GCAGCTCCAC TGCCGTCAAC TCCTGITCTC CTCAGAGCCT GTCATCCGTC CTTGGCTCAG GATTTGGAGA GCTTGCACCA
CCAAAAATTGG CAAACATCAC CAGCTCCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTT GCACCANCC
CAAGTACACA GCAGAATAGG TACAAGTCAA CCCTACAACT ACTACTTCT

SEO ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CECTCTGTCG CCCAGGCTGG AGTGCAGTGG CGCAATCCCG GCTCACTGCA ACCTCCGCCT CCCGGGTTCA
AGTGATTCTN CTGCCTCGGC CTCCCCAGTA GTTGGGATTA CGGGTGCACA CCACCGCACC CGGCTGATTT TTTGTATTTT
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTTGA ACTCCTGATC TCAGGTGATC TGCCCGCCTC AGGCTACCAG
AGTNCTGGGG TTACA

SEO ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGCCCATGT GCTTTAACAG GATGIAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG CAGCAAATTG CAGCACACTGA GCTTAACCGC ATAATTAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA TCTGCCAACCC AATTGTCCTA AAAAGAAACT TAGGCTTCAC ATTTGTGACA TAATTTCTTT TAAAATGAAT ATAAAATTTT ATTTTTNATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TTGTTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEO ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT
TTTCACCTAT CCTCTCATTA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTTAA TTTTTTGCCC CGACTCCTAG
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC
ATGTTGGTCC AATTTGCCTT CACAGAGGGT TACCTCTGCT TTTCTACCGA ATGTGGAATT GCTCCCATGT GGATTTINAA
GGAATTCCAG TCTACCCTCA GGGGAAGGNC CACATGTAAT GCCAGAGGTC T

188

SEO ID NO:485: (Length of Sequence = 376 Nucleotides)

GETCCGACGC TETETCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG
ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TGCGTCTCCA CGACAGCATC
TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA
CTACAGCGAG GCTGATGCCA GTCACTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGTCGTC
CACAGAGACC TCAAGCCGGA GAACCTGCTT CTMGCCAGCA AAGINCAAAG GGGCTT

SEO ID NO:486: (Length of Sequence = 396 Nucleotides)

TIGATATITG TGICTAATIC CAGCIACITI GAAAGCIAAG GCAAGGGGAT TACIGIATIA ATAAATICIC ATGCIGITAA
TAAAGACATA ACCAAGACIG GATAATICAT AATGAAAAAG GITAATGGC TCACAGITIC ACATGGCIGG GGAGGICICA
CAATTATIGG AGCAAACAAG AGACITIGIT CAGGGGAATC TCCACTTATA AAACCATCAG ATCACGIGAG ACITITITIGC
TATCATGAGA ACAGCATGG AAAATCCCAC CCCCATGATT CAATTACCIC CCACAGGGIC CCTCCCAGGG ACATGTGGAG
ATTATTACAA TTCAAGATGA GATTIGGITG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGITT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAAT AATAGAGITT AGTAATATGG ATGAATATAA GATAAATATT TAAAAAGCAG TTGTATTTIT ATAGCCCAGC
AAGATAAAGT TCAAATATGT ATTITTTATA AAGATGGATT TACAATAACA TCAAAAATTA AAATGCACCT TGAAATAATA
AAGACATGTA AACCCTTTTA TGAAGACAGA TTITTTAAAAG CATTITTAAA AATACTTTIT CATTGACAAA TAATTATCCN
TATTINIGGG GTACACAGTA ATGITTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT
CAAACACTTA TCATTTCTNT GTGTTAGGGG CCATTCAACA TCCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACIGCATTA AIGATIGENT TAACAGIATA TAAACAAGGG CCATGGITIT TITIACIAAA GIAGGICIGA AAGATCAATA
TAAATACTAA TGGGGGCAGG GAGGAGIGIT TIATACCCCA AACICCAATA TICCAGCICT GIGICCIGIC CIATTATTAT
AATTIGIAAA AATCITAACG ACGCAGIGAT TCGAGITITIC GIAACITCAA TGATGIGITA GAGGACAATG CATCITGGIT
TGAAGAATIT GCIGIATCCG AAGGCCGGAA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCTTA
CCG

SEO ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCITITA CICIGATCAT AATCICCCAC CIGICIAAGA GGITATITAT TCCITATITA GAGGGCCICT ATTGCCATGI
GCCIGGAATT ATTATATGCT CATCACITTA TGAAGAATAA AATTIGICIT TCCIGCITTA AAGITACATI CGITCITCCG
CTCAAATCCT GATCIGGTCC ATTAAAGAGI GITCGCAGAC AAAGITTCIG AAAGATTAGA GAAGAATCCC CCCCAAGATT
GCCCCAACAC TGAACTACAG ACAAACACTA TTTTATTTAA ATAAGGRGAC AGCITTCTAA AAGITATACAT TCCTCTAATA
AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACTCGCAA GITTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC
CCTTTTCTGC AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT
ACTTAATATT TTAATTTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

CCIGIACTIG TOGICCCICA TICACITAAT TATGATACTI GCCIGGCATC TIGCAGGITI CIGATGCIGI TACCCCAGIA
TAGACCAAGI GCAGACAGA TITCATTICT GCITTATTAA GGCACAGICT TGAGAAACCC ATIGGCITCA CACACAATTA
ATTAATTINI GGCAACAAGC TACTATATIG GCTIGCAGIAT TATGCAGITC TCTCTGGGCA TIAGITINCT CIAATATTIA
TAAAAGAAGG ACATGACTIT CIAAGGITCC TIGCAGIAAT TATGCAGITC TATTCIAATA GATGCTTAAG CATAAAACCC
ATTITAATAC TGTCCCAAGG ATCCAGG

SEO ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATITGENT CCAAAGITIG GACATIGCAT TICATIAATA OGICCCITAA GITIATITIA ATCIGIATIT TOCICCICCC
TITIGIGITC TITIGIAATCI CITITIGCIG TIGITITOGG TIAAAGAAAC CAIGITITIT TOGICCIGIG AGIGGCICCT
GITCAGAAIT TIACIGATIT CAICIGCIGG TATCATITAG CAIGITIGCIC TGICCGCCGI AGIACITIAA ACIAGACGIT
AGAICTAGAG ATGIGATCIA CITCCGIAGG ACITIGICAA GAATACTIGI AAGIAGGIAT TIAGGIACCA GGGCICACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTIT GCTGGAACAT TATCAGATGG CITAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA
GGTACCATGC AGCCACAAGT GGTGAACACC TIGTAGCCGG CATCCATGGC CTGGCTCATG GTATCATTGG TGGACTGACC
AGTGTTATAA CTTCGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTCAG CGGTTTCATA TCTGGCCTTG GAAAAGGGCT
TGTTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTGCATCAG AAACAGNCCA GGCGGTGAGA GACACAGNCA
CACTTCAGCG GCCCCAGGN

SEO ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCTTT GGAAAGTAAT TAGGATTAGA TAAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA
GGAAGAGAGA CCTGAGCTGA CACGCATGIN CTINOCCTCT TGCTATGTGG TGCCCTCAGC CATGITAGGG CACAGCAAGA
AGGCCCTCAC CAGATATTGG GGTGGTCTTN GACCTCCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC
CAGTCTATGA TATTCTGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTTAAGA
TNCAGACTTT CATTGCCTTT AACAGGGGCC AAGAATATCT ATTTCA

SEO ID NO:495: (Length of Sequence = 384 Nucleotides)

CEAGGAAGGC AAGAAGCGCA GGGGTGGCC CGCNTGGCGT CGGTGGCCTC CGCTCCTGCT CGCAGCCCCT GTGGTCAGAG
CTGGATACAA GATTCAAGAC CCTTCTNTTG CTTGTNACCC GCTCCAGGTT GGAGCCACAG ACACCCACCG CCACCCCGGC
TGGGTCTGCN TCCTTTCCTG TGCCTTTCCCC TCCAGAATGC GGCCTCAGAC CTAGAAGCTC AACCCCCCTA TGAGGGCCAC
GTCCTGGGGT AGCTCCTGAC CINCGACCTT ATGTCCAAAT TTCACACCCA TGGTTTTTCA TTTGACCCGG CCCCTTCTCG
CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEO ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTIAGIA AATGCAATIT TOGAACAGGC COCCATCITC AACTGGIATA GCATCTICCA CACCCTGIAG CCTICAAACA
TCACCTGITA AAATACTGCC CATTCCATGT CATGIATATC TGCCCATTIA TGGGAGCAGT GAGTGGAACC CTGACAGTGA
CGGACTITAA GCTGIACITC AAAAATGTCG AGAGGGACCC GCATTTIATC CTTGATGTIC CCCTTGGAGT GATCAGCAGA
GTGGAGAAGA TTGTGNGCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAACTTGC
GGCTTGCTTA TAAAACAGGA AG

SEO ID NO:497: (Length of Sequence = 273 Nucleotides)

GATTIATIAA GIATCCCCGA AAATATAAAC ACAAACCAGT AAAAAACAAA ACCGTAAAAC GICAGGCCIG GAGCIGCAAT
AAGACAGAGA CAGGAGCAGC TCACACGIGG CCTAGGIGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGCCAAGGGA
GCCCTAGGGC GAGGGGAAAG CAGGGIGICG GCAGCGAGAT GGWICCNGGG GITTAGACAC TGCTGGCTIC GGNCCCGGCC
GGCACCANGA CICTCACTIC CAGCIGCGAG CAG

SEO ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTTCT CAGGTACAGC CTGAGAGTAT GCAGATATAA
TACACCACAG ATGATTCTCT CCCTTTTTG TTTTTTTTT TTTTTGAGACA GAATCTCATT CTGTCACCCA
GCNTGGAGTG CAGTGGGCTG ATCTCGGCTC ANTACTTCTC CCGCCTCCNG GNTTCAAGCA ATTCTCCTGC CTNAGCCTCC
CGAGTAGCTG GCNCTACAGG NGCACACCAC CATGCCCATC CAATTTTTGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEO ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGIGAAT GACGAGTIGA TGGGTGCAGC ACACCAACAT GGCACATGIA TACCIATGIA ACAAACCTGC
ACATTGIGAC ATGIACTCIA GAACITAAAG TATAATAATA AAAAAAGAGA ACCITIAAAA AAAAATAGAC TGCCAGATAG
ACIAATAAAT AAAAAGAGA GGITGAAATA ATCATAAATG ACIAAGGGGA TGITACCCCA CAGAACIACA AAAAACAAAC
AAAAAAACCI CAGAGACIAC TAAAACACTC CTATGCACAC AAACTAGAAA ACCIAGAAGA AATGGGIAAA TTICTGGAAA
CATACANCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGITTCAAAA ATTGAATCAG
TAATAAAA

SEO ID NO:500: (Length of Sequence = 474 Nucleotides)

TITIATITIT TICACIGITA CIGITITINA TOTTIGATIG ATAAAAATGA AAATGCCAAA ATGAGGGITA GOTTAATITA
AAGIATAAGC GIAGITAGCA GOTTITINCIA ATCACICCIG TOCATITAAA AAATAATCOT CATAGGAGTA TAAACAGAGG
AAGGAGAAAT GGAGGATGGG CITAAGGAGA AGAGIATITC ACAAATGICT GCATAGCAAA TICAATTCAT CIACCIAGIA
GCICCITCCG TGITAACCTA CAGGIGITCT COCCICCAAA AAAAAGCATC TITTAGGAAG AAACCACCIT AACACTACCT
TITAGANGATT GAACITCCAG GGATAGGTIG TITGAGGAGAA TCACCAAAAG CCATITITAA ATGAATITIT AAATTACCGC
TITCICATIC CITATAATAG TGIAGCAGCC ACCITCCCIC TACTATGGAA CITTTAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

SEO ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCCC AGGCTGGAGT TCAATGGCAC AAACTCGGCT CACTGCAACC TCCGCCTCCC
AGGTTCAAGC AATTTTCCTG CCTCAGCCTC CCGAGTAGCT GGAATTACAG GCACACGCCA CCATGCCCAG CTAATTTTTG
TATTTTAGTA GAGACGGGGG TTTCACCATG TTGGCCAGGC TGGTCTCAAA CTCCTGAACT CAGGTGATCC ACTCCCTCGG
CCTCCCAAAG GGTTGGGATT GCAGGCGTGA GCACCACGNC CAGCCATGAT CCTTAAACTT GTTTTAAGAG GTATAATAAC
TGGAAATCAT GATGCTCTTT AAGGAATACC AATTGGATGT ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC
AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

SEO ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGIACC CATCICCATT TICAGAGAGC TOCGATGGAA ATTICIATGA ACTAATICIC CTGCACATAC TITGGIACAA GIGGGCTACT GGAGCCACCT TCCITCGITC AATCAAACAG CATTIATICA GCTIATTIAA TGAACACTAT CCAAGATACT TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCTGAG AATGAGTGTG ACAGCTCCTA CCTGTAACAG CTCTTCAAGC TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGCGGGCAAA AGTCCGCCCG GCTGGAGGAA AGTGAATTCC GGGATTTACA GAGCAGGTAG AGGCCATGCG GCCCAGCCCT CAAGCA

SEO ID NO:504: (Length of Sequence = 248 Nucleotides)

TIGCICITCI TITICIACCAT GGGAACGICC TICICAGGGG ATTITNAGGI CICGGGGTT CIGIGITICI NAATAGGCAG
TITICICGCIG TCGGCTAAGG GCITATCCAG GACATATCC AGAGCCCTGT AGGGGTCGIT GGGGTCTTTG TCATCCTCGT
CGCTGGGCAG AGCATTCTCA GGCATCTCCT CIGINACGAT GTCCACCTGC TGGGCAAGGG CGATGTCCTC GTCGCTCTCC
GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGITGC CCAGGCIGIT CICAAACCCI TGAGCTCAAG CAGTCCTCTC ACCIGICICC CAAAGINCTG GGATTACAGG CATGAGGAC TGINCIGGGC TTACTAAATT TTAAAAGATT TGIGITGAAC CATCIGCIGA TCATGGAGCA GCAGAGAAAT TTATTGACAG ATTITCIAGG GTCATCACTG ATGACAATCT GNIGCCAGAA CAAGCCTGIA ATGCTGATGA AACATCACTG TTCTGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCCTGTAGGC AGTAAGGATG CCAAGGACAG AATAACTGIT CTGGAATGIG CTAATAATGC AGCAGGCATT CAATAAG

SEO ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCIGGIG ACTITAGCIA TECCIATCAA AAGCCIGAGG AAACAACCAG GICCCCAGAT GAAGAAGATI ATGACIATGA
GICITATGAG AAGACCACCC GGACCICAGA TGIGGGIGGC TATTACIATG AGAAGATAGA GAGAACCACA AAATCICCAA
GIGACAGIGG CIACTCCIAT GAGACCATIG GGAAAACTAC CAAGACCCCT GAAGATGGIG ACTATTCCIA TGAAATTATI
GAGAAGACCA CACGGACCCC TGAAGAGGGI GGGIACTCAT ATGACATAAG TGAAAAGACC ACCAGCCCCC CCGAAGIGAG
TGGTTACAGC TATGAAAAGA CIGAGAGGIC TAGAAGGCTI CIGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG
ATGGTTGGCC ACACAACTT

SEO ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACTATT TIACITAAAA AATAITCIAT TACITCAAIG TCATGICIGI TGAACGAGGA ACTCAACAIG CITATITINCC
TITGGITCCA AGAAAAACCC AAGICTAACC AAATGIAIGC CACAAGGAAC TGCCAACIGG GITAAAGCIT GGIATITICC
TGGITATCAC CCTATTICCT GGIGIAGGAC CIGGGGITTA ATAGAGACAT TIACATAAAA AAGGIATTIG GITAAAACAA
GAAATATGCA TGCNCTICCT TACCACCTIC CIGGGAAAGA ACTGCITTIT TINCITICIT TCTGIGAAIC TIGITCAAGA
CATCCIGIAG TITAGATATA TGGGCIGCIT CITTITTACC CICAAGCITT TAGGIGACAC TTATAAAGGI GAGCATATCA
TTCTATAAAA TGGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGITTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TITTTGAGGC TGAAGCAAAT
CTGACTGATT TTCAATGTGA AAATAAAATA TAAAANCTGT TTTTAGAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT
TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATTC ATCAGATTAA TCTTTGGCCA ACAACTGTTC AAGAACAATG
TTAACATCTG CATGGCAATG CTACATTTNC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

SEO ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTITCAC TCTTGTTGCC CAGGCTGGAG TGCAATGGCA TGATCTCGGC TCACCGCAAC CTCCGCCTCC
CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGCGCC ACCACGCCTG GCTGATTTTN
TATTTTTAGT AGACACGGGT TITCACCATG TTGGTCAGGC TGGTCTCAAA CTCCCGACCT CAAGTAGTCT GCCTGCCTCA
ACCTCCCAAA GTGCTGGGAT TACAGGCGTG AGCACTTGCG CCTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC
ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEO ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTTCCTCT TACTTTCCTT CCTTCCCTCC TITCATATGA GAGACTCTAT ATGGAAAGG AAGCTGAAGT GGCCTGCACA
CGATATAGAA AAGCCATATT ACTTTCCTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA
TTTGCCCAAC TTCTCIGCTC ATCATTIGCC ACTGTTCTGT AAATTTCCCA GTCCCCTCAC AGAAAGCACA TGGCACCATT
TAAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCAA TAGTGAAGTT CTCCACAAAT
GGGGAGACTT CTCCCAGGAG GAGGGGAGCC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTTCTTGC
TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

SEO ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGIATATI ACAAAAAGI TCCTGTACCA AAGITCITAT TAGACITTAT TITTGTTTIT TITAATTTTIA AAATTTTTIT
TGTTTTTATT TITTATTTTT AAATTINCTC TCCTCGTGGT GACTGTCATG TGATTGTCTC AGITTCTGGA CCAAACAAAC
ACACTAATAA TTTTAAATCT GAAACAGIGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGGTACCTGT
TAGCAAAAGT GTCACGATGC TGCACCTCTA CCGAAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCCTGTA
ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAAGACAA AAGAGGTATG GAAA

SEO ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TITUCICIEG TGAATGICIA ATCAGTGIGA TITICCATAGG CIATACITAC CITITGGGGG CIACITGCCA
ATNATGITTG GICAGTATCC TIGCAAACAA CAGAGTGACA GATICIAAAA ATGACITTGC AGGCCAGTAC TAAGAAAGAC
ACCAAGGTIC ATGGGCTGC AAATAAAAAG TCCATAACTI CCCTGCCCTA CITICACCAAG TGAAATCGAG TICCTCACAC
TICCIGCACAC AGCICITTCA GGATCITCCC TICCCTTCAA GGCTGICIGA TGITCAGTIT AATTIGATIG TATTIGTATA
AAGTGCTGAG TGITGAGTCC TCAAAGAAAT TTACTITCAG TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA
ATGATTGATT ACTTATTTGT TTGAGTATCA CTTTGTGATT GICCCAGGGC TGTATTACAC ATA

SEO ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGITTCC TEGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC ACGGACCTAT CAGTCTGCTC TEGGGTGCTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG GAGACACGTG TAATGTGTGC AGCTGTCAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC ATTTCCTCCT TTGAGAACCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACTT

SEO ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAAA TGATTCCACA CACGAGTAAA GAGATTTACC
AGGAAGAGC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG
TATTGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG
TTCTGTGCTA AGCTCAGGGG NIATAAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAACTGGGT
AGATAGTTCT ATAAAG

SEO ID NO:516: (Length of Sequence = 368 Nucleotides)

COCATGEAGC TOGAGAACAT OGTAGOGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCAA
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCCTCACATC AGCCAGTGCG AAGAGCTGCG GCTCAGCCTC GAGCGTGACT
ATCACAGCCT GTGCGAGCGG CANCCATTGG GCGCCTGCTG TTCOGAGAGT TCTNTGCCAC GAGGCCGGAG CTNAGCCGCT
GCGTCGCCTT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCCGGATNAC AAGCGGAAGG CATGTGGGCG GCANTAACCG
CAGAATTTTC TNAGNCACAN GGGTCCTGAC CTCATCCCTG AGGTTCCC

SEO ID NO:517: (Length of Sequence = 393 Nucleotides)

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTCC AGATAGAAGA GCCAGAATGG GAAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TITACAGTGA
TGGTGTTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG
TNCTGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCCTGCGCA GCAGCCTACT CCTGGATATT
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT
TCAGACCAGA AGTCTGTCTT TCCTCTTCTG GGGCCGAAGG CTTGTCAGGT TGCATCTTCC CAATT

<u>SEQ ID NO:519:</u> (Length of Sequence = 382 Nucleotides)

GGCCGICCGT AACAGAAAAC TCAGIGCATA CITIGCIGIT GITAGGITGI CAATATAGIC TITCIGIAGG ATGGATAGCA
TGITTGAGAG GIGCCAAACA AGAACITITG GGGITAGIAG TGIGICITGI GGAGGGIATT ACAGGACIGI GIAATIATAG
GACTCTAACT TGACATGGCT TGGCACCCAC TTGCAGCTAG TGGGIACAGG GIACAAAAGA TGITAGAGAA AAGCTCTACA
GATTACGIAC TTCTGIGICT TCGIATGCTC AACACTGICC TITTGTCCTC CATGAAAGAT GAAGGAAGCA AATTTATGIA
TGINCITTCT TTGACCTTCT TTAATCCTCT GATACTTTIT AGATTGCATG ATTTTACTAG GC

<u>SEO ID NO:520:</u> (Length of Sequence = 304 Nucleotides)

CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA
CAATGATGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCAGGN TTATCACAGT
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC
TACAAGACGA GATTTCATTT TACAGCTGTA GTAGCCCAAGT GCATAAAAGC TTGANICTGT CCCA

SEO ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGCAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT
CCAAGTGATT CTCCCGCCTC AGCCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGGCCTC CCACAGTGCT
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCCA
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTTTTGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTTGCTG GTGAGGAAAT TCTNTTGAGT TCTGTAGGAA TTTTTTATAGC TTGTTTTGCA TTCAGTTCTA
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT
AGGATCAGTC CCAAGAAGAA CTATNGGGTN GGGGAGAGGT TTTTCTTCCA CTTCTTGGGN TTCAGTGACT TTGAGATGGA
CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEO ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTTGTCTCT ACTAAAAATA CAAAAATTAG CCGGGCATGG TGTCACGTGT CTGTNATCCC AGCTACTCGG GAGGCTGAGG CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTGCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG AGCAAAACTT TGTCTACAAG TCCTCCTACG CTGACAGGTC CTCACTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA CTGACGINCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGCA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAGTTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG
AAAATTATGA AAGGAGTTTG ATAAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCCTCCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGIG TGGACCCTAA ATTTAAACAG CTAAAGCTAT AGICTAAGGA CAGTCTCAAA TAAATACCTT TGAATTGTCA
TATGGTGCCC AGGAGGGTCT TGTGGAAAGG GTTTCATGGT AGTGAAAGAT GTAATANCTC TTTTTTCCTT TTAACCCTAA
GCCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGGTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTC
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC
ACCGTCCAGG GGAAGGGCTG TTAAAAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG
GAGAGATCAG ACAAGGAGTT GTTCCTGAGT TNAAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEO ID NO:527: (Length of Sequence = 336 Nucleotides)

TITIGCAGITI TACATICCCC TAGTACATCC CIGCITACTC GGGAGCACAA AGCITGGITG TAAGAAATTG TGATITIGGAA GIAGGAGAAA GCAAGGAAGT CCAACCICAG GAGIGICICT GITACTAAGA GGAGAGTGAG ATCCAGGGIG TGGGAGATGA TCTGAAGGIC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGITTAAAGGA GGATATATCT ATATNCTGGG AGATGAGCTG AATTCAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGITTAAGC CAAAATTAGGC TGGCATCCCC CACCACGCCC AACTAA

SEO ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA GCGTGAGGAG GGGGCCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT CTGTGGTCAT CGTGGTCAT CTATCTTCAC TGTCACCTGT ATCCTGGTTAC ACATACTCAG TTCCTAATTG TAAGCTCAAT TTTGGTATTA GCAAAAAGCAT CTGTCAGTTT TTCCTCAATT ACTCACACCT CTTCTTGCCT AAATAAAACA AAGAAACAAA GAAAACAAGT GTGGTGTCAT TACACGTCTC GGGAGTTCCT CGTCACTGAC TTTATATATA TANAANAAAG AATGCACATG CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG CCCTTAAAGG CTGCCGANAA NCAAAATGGG GTGGAAATTA GCAANCGTTG TTTTCCGGTC AATTNCCAAT TGTGCACTGG CTGCGTTGAG ACAAGNCCAT CTTCCAATTT CCC

SEO ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CGGCATGCGA TTCCTAGTGC AGAGAGGGGA
CCTGGGTTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAATGGT GTCCGGAGTC CACAAACAAG
GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCCTTCA GCATATGCCA AGAGAGAGGC TGGGCCTGGG CGTGTGGAGC
CAGGCAGTCT CGAATCCTCT CCTGGTTTAG GGAGGGGAAG GAAGAATTCC TTTGGCTACC GGAAGAAAAG GGAGGAGAAG
TTTACAAGCA GCCAGACACA GTCTINCAAC GNCACCAAAG CCTCCGTCGC CAAGCTTTCG AGCTGGGGGC TTTTCCAGCT
TTCCCTCCAT TA

SEO ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTITITAAT AATAGICATI TAAAGIGGGI GAGATAATAT CICATIGIGG TITINATIIG CATITCICIG AIGCITAGIG GIGITGAGCA TITGINCATA TAACINCIGG CCATITGIAT GICITTITIT TITITITITIT TITITITITIGA GATGGAGICT CACTITGICA CCCAGGCIGG AGIGCAGIGG CGCAATCIIG GCTTACIGCA ACCICCACIT TCIGGGITCA AGIGATTCIC CIGCCICAGC CICCCAAGIA GCIGGGATTA CAGGAGCCCA CCACCACGCC CAGCTAATIT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCTTGA CAGTGGGGGC AAGTCCTACC AACCTGCACA GCACATCCAG CAGGNCAACT GTGGCTCAGC
AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCCACAGC GTTCCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA
ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTCC AAGAGATGAT CCACTCAATA ATTTGACGAT
ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCTTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEO ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACTCT CGACCITTIGG GAGCAGCCAG GGAGGAGTCA CTGTCCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA GACAGCTGGG CCAATATGGT CTATTACCGC CTGAAACCCC GCCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCCC ACGTCCATGT CCAGGAGCCC CCCTACTGTC CTGGTCATCT GTGGCCCGGG GAATAATGGA GGAGATGGTC TGGTCTGTGC TCGACACCTC AAACTCTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGCCGTNAG GGCTCTGGGA TCT

SEO ID NO:533: (Length of Sequence = 378 Nucleotides)

GTAATTCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCACAGACC TTCATGTTGT AGCTCATCGC AGTGTATTGT
TTGTTGCTTG TCTCTGTCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC
TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTTG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT
TGTCCGGTGC ATTGTCCTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT
AAGACAAGGA TACGTNTTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEO ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTT GTCCAAGGIT TATCAAATTA ATTGATTTIG GGGGGCAAGA TAAAAATTT NATITGATTA ACTTTCTCTA
TTGGTTTTG TTTTCAATTT CATTTATTTC TTCTTTTATC TTTATAATGI NCTTACATCT GCTGGGTTIG GGCTGGGCAC
AGGGGCTCAT GCCTGAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC
TGGCCAACAT GGCGAAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC
TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGCAGAGC TTGC

SEO ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGGC TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT
TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTTN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT
ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT
GGGATTTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA
ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACGG ATTGCTGGAG
GAGCTTG:AA ATGTAGTCAG CCGTTTCTTT TGG

SEO ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA
TGCCTGTAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCACGAGGT CAGGAGATCA AGACCATCCT AACACGGTGA
AACCCCATCT CTACTAAAAA TACAAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCCTGTAGT CCCAGCTATT TGGGAGGCTG
AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG CGGTTGGAGC TCCAGCTTTT
TTGTTCCCTT TAGTGAGGGT TAATTTCGAG CTTGGCGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGTGA AATTGTTATC
CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEO ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGIAGCACT AAAGCCCCGI TITGGTCACA CTCTCACCTA GGIGAGAACC TGACCAAAAA TGIGGAATTA TTAAACAAAA TGATGGGAAG CCAATGINCI GAAACTGAGC TCTTGCACTA GGCCCCCACA GACCAAATTA AAATGGAGTC ACTAGIGCTA AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCCAAAACAG AGCAGIGTT TATTTTTCTC CAGAAAACAG GAGATTCCAG CATAATAAGA AAGTCTCCTC TGITGTAACC CTTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEO ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCITCATGG GCGTCCIAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT TCATACATTT CACAAATGTT TCAGTATCCT CTTCTCCCCG ACCCCAGCAT GAGCITTAAT TGGATGTATT TATTCTTTCA CCAGCATGCC CATGAAGGAC CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAACTTTTTC TCTTCCTTTT TCATGCTTTT TTTTAAAAAA AAAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEO ID NO:539: (Length of Sequence = 362 Nucleotides)

CATGICATAG TGGCCIGCIC TCCIAACACA GCACAAITTA GGGCATATIT TCATGATGGT CIATCACIGG ATTACAACAC
ATCICITCAT TAAAGICITG GGAAAGAGGC TTCAACITIN CIGIGITGAG AAAACITCAC AGGIGIGIAA AGITTGATCA
GIATGIATAA TATATTINAT TACATATATI TNATITINAT TITTCATITT TITGCATACA TAGCAGGIGT ATATACITAT
GGGTIATATG AGATATTITG ATAAAGGCAT GCAATGIGTA ATAATCACAT CAGGGIAAAT GCAGTATCTA TCCATCACCC
CAAGCATTTA TCCTTIGIGT TACATACAGT CCAATTACAC TC

SEO ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA
AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC
TGAGACACCA GTAGTTCAGC AATAAGTGGA GAGAAAACTA AGCAAATGAG AAACTTAGGA ACAATTATGC AGCAAAGAAC
AACTGGATAA GCTGAAAAAGT GTTTAAAGAT GCTGCCGTAA ACACTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG
AGGTATGGGA AGGGTACANG TATGTTTGTG GGGCAAAATG GTGAGGAGAG CTTAAACCCT CTTCTTCCTT AATGAGGAAT
TAAATAATCC CATTAA

SEO ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTIC CAGGCCTICG AAAGGCCAIC CITTGGACAC AIGIAAAAAG CIGICITGIT GGCCCGTTAT TCCCACIGAC CCGICIGAGG GACCACCAG GAGCCAGCAG GAGCCAAGCA GAGCICACCG GAITTGGGAC AAGGATTITA AAGGCAGCIA CAAAGCIGAG CICIATTIGC TGATGATAGT CICIGITCAG CIGITTAAAA TGACIGICIG ACICACCAIG GIAATTITIC ACAAAATTAAA AACACATTIT GGGITGIGCA ACAGIGGITC TCATCTTICC AGGCAGGCAG ATTATTITAA TGCTGITTAT ACAGGGAATT GGGACTCTCG G

SEO ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGITGITTC CTACCTIAAC CAATACCTCC TGGAAAAAAG AGGTATTGGT ATAAAAATAA ACCATACCCA AACATTCCCA CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGGC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG TCAAAATCTC AGCTCTGTCA TGCTTTGGTT GACCTTCAGT AAGTCCCATT TNCTTCATCT GTAAAATGGG AATAACATCT ACTCCACAGC ATCATTAGAA AGATTAAAATA GTGGCTGGGC ATGGTGGCTC ATGNCTGTAA TCCCAGCACT TTTGGGGAGG

SEO ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTIGITIC AATGACAC ACCICATIAA TIGIAAGCCC AGIGACACIG CITGCIGITI CAAGICACIT TIAAATTACA
CACGIGCIAC TIAATCITAA AAGCAAAATT AAACATIGGA CIGGITTACA TITCAAGCIA CAATATGGAA CCATIGIATI
TGGAGGAATG AGITTAATAT GCATIGIAAA ATAAAATTAG GGGGIACITI GCATTCACAG CGGCITATGI AATTAGGIIC
AGICAACTGI AATGITTCAG GITAATGICT TCCATGGATG TATGCIGIGI AAATAGIGAA CITACATATC CCTTAATACA
TCTGAATTAT TACATAAATC CITAATATTA

SEO ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCCGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA ATCTCCGAAG TGATGTGAAC AGTGGAGCAC ATCGCTCCCG GCTTGGACGC CTTTNACCTT TAAGTGTTCC TGATTTAGTT TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAACTAGC TTTTTAAGCC AGGTTCCTGA ATTTGGTAGG CATGGACACT CCCAGTAG

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCTGGGCAC TGGGAAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTT CAGTGTATGC CCTTTTCGAA
GTGTTAAACT TTTTTTTTT TTTTTTGGA CAGGNTCTCA CTCTGTTGCC CTGCTGGAGT GCAATGGTGA GATCGTAACT
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GINIGTGCCA
CCATACCTGG NTAATINTTA AAGTTTTTGT AAAGATGGGG GTTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACINCTGGGC
TCAAGTGATT TGCCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTITG GGAGGCTTGA GGCGGGAGEN TCCCTTGAGC CGAGGAGTC GAGATCAGCC TATGCAACAC
AGTGAGACCC CTATNICTAT TINATITAAA AAAAAAAAA AAAGGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG
ATGAAGCCTA GAGCCTCTCA CTGCTTCCTA GTGGGTCTTG GGTTGTAATT TGCTGTCTTG GGTATATTTT TTGGCAGAAA
GCATCTGGCA TCAGGCACTG GTTCTCAAAG TCGGGCCCCCC

SEO ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGIT TCACATAGIG GCTCAGTCCA GCCTIGIGGG GATCITGCCG GGGCCTGGG CCGGTGGTCC GGGGCCTAGG GGGATGCCTN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGGA CAGAGGGGG TGAACTTGCC TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCTGAGGCT GGGGACCACG TGGCCCTTTG GCCAGCCAGG ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGGNCA CATAGAGG

SEO ID NO:548: (Length of Sequence = 311 No: eotides)

GAGACAGGGC TGTTTCCTGC ACTACACTGG TCATCTGACC ACCTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA
GCAGTCCACA TACAAGTTTA AAAGGGGCCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC
CAAATATTTC CAGTTTATCT TACGGCTGGA CTCCTATTCT CCCACACTGT TTCCTAAAGA AGGTCCACACT TATTTTGGNT
ACTAGCCTAG TTTAAGTGGA GATACTGTGG GCAACTTNAA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEO ID NO:549: (Length of Sequence = 387 Nucleotides)

TITATITICS TGIAAAGACA GGAAGCIGGA AAATACACIG TATITAAAAT TINCITGGIT CCCCCTCACA TIGIGGAAAC CCCCTCCCCC CAGAGCIAAT CIGITCAAAC TCAAATACIT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAAAA AACAAAAACA AAAACCAGAT GGAGAAGGIA GCCTGGGCCCA GTAGTGTCAC TIGGTGTGGA CGACTGAGGI GCTGAACAGG AGCTTCTGIT TCTGTTTTTT TCTTTTCTTT CCTCCTTTCT CTTCAGAGAG GGGATCINGA AGTAGCTGGG TGTGTCCAGT TCATGAAGG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAAACTNGG CACAGGAACA CGGGTTT

SEO ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCCAAC TCTTCACCAA GTAGGGGCCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCCTGGGTGA GCATACCTAC TGGTAGTGGC TCCGTGATTC CCTGGGGAGG GGCTCCCAGA GGTAACCAAC CAACCCTGTG CTACTGCTAT GACCACAGTT CTGCTTCTGC TGCCCTCAAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCACGCT TCTAGCACTA CGCAGTCACC ATATAAAGAG GAGCCCAGTC TCTCTTCCTT GTGAACCCTT GACCCCCAAC TCTTCACCAA GTGGGGCCCC CAGCTTGGGC CAGCAGCACA GTGGCCCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCCGCG

<u>SEO ID NO:551:</u> (Length of Sequence = 320 Nucleotides)

GAGTTINIGG TGAGCCGAGA TCACGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTCGC GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG GCTGTGTCAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCAGT GGGAGGAGGG TCTTCCATGG GGACGGACTT CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEO ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTIGGC TGCGCATCGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA TCTCTTAGGAT CACGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT TCTCTTTGGT TATGTTTGTT TTTATGCTTC TTTTGTTATC TGTAAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACTT AAGGGCAGTG TACG

SEO ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACAA TATGIGITCT AGACAATATT GGITTAGATT TITTAAAGAT CTAAAAATCA ATTATGGAAA GCCAGCAGCC TGATCCAGIT ACTGIGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGI TITGCAATGT GICTACCCCA ATTITGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAANCTG CTCCTTTGCA AACAATATGA AAAGGTTTGT NCTITCAAAG TAGAITCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAAA GNGAGAAAAG CAAATCTTTC TATTAGTCTC AAGCAAGTCT TCAGAITTAC ACACAATCTA ATGGAGGCAT C

SEO ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTIT TITCAATAAG GCTATTGTAT CAGCCIGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAATTT
ATAAAGGAAA GAGGTTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCCTTT ATAAAACCAT CAGATCTAGT
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCCTC ATGATTCAAT TACTTCCCAT TAGGTCCCTN
CCACAATACA T

SEO ID NO:555: (Length of Sequence = 305 Nucleotides)

GCIGGGACIA CAGGCGCCCG CCACCACGCC CGGCTAAITT TITGIATITT TAGIAGAGAT GGGGITTCAC CATGITGGCC
AGGATGGTCI CGAITTCCTG ACCICATGAT CIGCCCGCCT CGACCTCCCA AAGIGCTGGG ATTACAGGCG TGAGCACCGC
GCCCAGCCCA ACACATGGIA TITICIGICA TITICATTIA GICITCIGGI TGCTGIGIGA TGGTCTCAGG CITIATTIAC
ATTICICCGA TIACTAACAG ACTIGAACAT TICAGCACAC TITITAGGIT ATTGAATAAC CCCTA

SEO ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTTGGT GATINCIAAG CTCIGITTIN CTIATCCIAT ATATATATGI GGTIGGITIT NATTTTAGGA TTTTAAGGIT
ATCCCIAATA AATTTIGAGA TGIGITCCAT AGCIAGCCIG TIGAGATCIT TINATATCAA AAGITAATAT CIGIGGATTI
MIAATCATIC TTTCIACATA TITAACAAAG TCATTAGCAA AATATTGAAC AAAACCIGIT ATTCATATCC TTAGATACAG
AACATCAATA TCCIGAGATA CAGTACATCA TCAAAATGIG GTCCCCAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEO ID NO:557: (Length of Sequence = 349 Nucleotides)

2

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC
CAGGATGTCT TGCTCAAAGT CCTTGCCTCC ATTCACACCT TTCAGATTTT TGCGAAACTC CTAGAGACAG GCCAGTAAGT
TTTTTCCCCT TGTGTCAACA CTGAAGCCCC ACCTAAGGAA CTCTTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG
CGAAAAAAACC CACTTCCCCA CCCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCCTTGA TTCCCTTGGA CAGAACCCCA
TCCATCATGC CCACTGGAAT CCTATGTCC

SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCG ATCACCTGAG ATCAGGAGTT CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAAA ATTAGCTGGG CGTGGTGGTG TGCGCCTATA ATCCCAGCTG CTTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTTN CAGTGAGCCA AGACTGCACC ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCCG CTGGAGGAGA ACGTGAACCG CCGCNTGCTG GAGGAGGGCA GCGTGGAGGC GCGCACCATC GAGGACGCCA TTGCAGTGCT CAGCGTGGCG GAGGAGGCCG CCGACCGGCA CCCAGAAAGA CGCATGCGGG CAGCCTTCAC AGCCTTTNAG GAAGCCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

SEO ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGIAAAC ATAAACCCAA ATATATCIGI AATTACATTA AGIGCAAGIG AACCAAAACA GITCAGATAA AAGACAGTAC CIATITCATA GCATTATGAC TATCATGAGG TAATATATGI AGAGATTAGA GIACACATGI CATATTAGGA GGIGIGCAAT AAATGATACT TTATTCIGAA GATTAACATA ATTCATACIT AAAAGGATCA AGAACIAGAA TATTAAAAAA NIAGAATGIG AATGITTCIG CAAGITTIGA TAAGAACAAG CCCATAAATT AATCICTAAT TIGCIACATT TAGGGAATAT GGGIAATGAC TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TETGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGIN AGCACGAGAG AAGGCTGAAC TTCATATTTT AACAACCCAC TTTCATGATT AINATAATCT TCGCATTTAT TTTTTTCGGT CTCTTCATGT NCTCTAACTT TTCTCTGGGN TTTTGGTCTT TTGCTTCTTC ATTTTTAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TITITITITE GAGAAACAGA AGCTGAATAT CCTGATITGA TITGCCACAC AGGCGITCAA TGGCTIAGCA GIGCTAAAGA
TITATITITA TITTITIGGG CTCTGGGCTG ACATTGGAAA TITITCTGAA TGAGAAAAAC CATCCTCAAC CACTGITITT
TAACACIGAG TAACITTGGA AATTAACITT TGCCACAGAC TIGAAAATGI TICTTAATGA ATTIGACCIG AAATTACAAG
GTACAACAAC ATAATATGGT AAATTCATTI CAATAAAAAC TAAAACITAA GATTGICAAG CTGCTTTATA TACTINCTGT
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGIACIGIG TGITICATAC ACATGITICC TITAGICITA AAATCIGGCI CATGGGGIAA ACACTATIAT AATCICCATC CICCAGATGA GGAAAGIGAG ACITAGAGGI TAAGIACATI TIAGGATAAA GTAGGGIATI TCGATAAATG TITCAAATGI GITICIGGIC TCTGAGGACT ACACTCCCAG GCTGCTGGG ATACAAAATA CCCTTTCTIT ACCATAGGAG CACTIGGGTA GAATATITICA AGAACAATA AACTGGCTGA TATTITAAAGI TCTCTTCAGC TCTGACATIC TATAAATTICA TTGACCCTCT

TIGCATTIAA TIATGITGAT TITCCTTCT ACCCCTTGCT TAGCTAAAAA TATACCCCTT CINTGTCCAT GGACAGGAGG ATGGG

SEO ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACTTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG
GTCAGAGGCT AGAAGGGNGC TCACAGGNTT GCCTGGGGAA GCCTCGGCCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA
CCCACCTGGG CATNAGACTT GCGGCAGCGT AGGGT

SEO ID NO:566: (Length of Sequence = 275 Nucleotides)

TIGGAAAAAA GAGAAAAAAA AATICIGCIT CATTIACGAA TGITGCCAAA GGAGGCAAGI TITCAACTGA AAACAAAACA
TAAAAGGICTA TGIGGATGCA GCCAAATGIT TCICCATTTA GAAAATCATC ATAAAAGGIG GCAGCACITT TTITGCITGI
TAACIATATI ACITATAACI GGCIGCACCA ACATITCATC TCAATTITTG GAGIGITTCI TCIGATCAAT CCTAAAAGCA
ACACAATCAT TITAGAGGIT GCAGACTACA ACAGC

SEO ID NO:567: (Length of Sequence = 349 Nucleotides)

OGCIOGINIG TOCCACACAA ATGITIAAGA AGICACIGCA ATGIACICCO CGGCICIGAT GAAAAGAAGO CCCIGGCACA
AAAGATICCA GIGCCCCIGA AGAGGCICCC TICCICCIGI GGGCICICCI AGAAAACCAG CGGGACGGCC TCCCIGCIGA
TACCGICIAT AACCITAGGG GENCCICGGG CAGGCAAACI CATCICGGIG ATGGCIGIAG AIGCIAACAC TGGCCAATIC
AATGCCACAC CIACIGGITA CCCITTGAGG GCATTICICC AGACAGAAGC CCCITGAAGC CTAGGIAGGG CAGGATCAGA
GATACAACCC GIGITTGICT CGAAGGGCT

SEO ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGCATCC TGTGTTAAAT GTCATCCCGC TCANCCCTTT CCCAGGGCTA TTCTCCTCCC ACCTGCTGCC AGGCCTTTCC
CTGGCCATCC TGTGTTAAAT GTCATCCCGC CCCTACTGTT ATGTTCTCCA CAGCACTTGA ACACGACCCA ACATGCCTTT
TCACTTCAAG GTTTATTCTT CTATTAGTTT TCCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCTGCTCG AATGCCTCTT
GAGAGCCAGT GCTTGTATTT TGGTCCTNGT GGTATGGGCC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA
CAAATGAATT TGTGTGACTA TAGTTCATTG TTCATAGTTC ATTCATAG

SEO ID NO:569: (Length of Sequence = 328 Nucleotides)

TGICACITAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINCTCAATA AATGCTAGCT CAGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTACTCAATA AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTGCT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTGCTCAATA AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCCTA AAGGTGCTC

SEO ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTTGA AACGCATCCA AGTAAAGCAG TAAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAAATA AAAAAAAATC ACTACAGGAA TTTCATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEO ID NO:571: (Length of Sequence = 338 Nucleotides)

AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT
TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT
TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAACGGA CTGTNCTGTT CTNCTGGGTC TCTGTAGGAG TTTGAACGAG
AAGACTGGCC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGCNTCTA
GGGCGTATCC ACAAACTT

SEO ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTICCAG AAGIGACAGC ACAAGICIGA GITGCIGITI GGICIGGIGA CCTCAGACAC ACTAATITGA ATTGAAAGCT
AAGAGIAAAA ATTINCIGGI TACAGGCGAG TCATACTCITI GCAAGIAGGIT AGCAAAGGGA GGCCCAAATI CTCAAGGITG
TTGAIGGGGA ACTIGCCACT AAGAGAAGGC AGAGAGGICC CTAGIGGGTA TATTINCIGC CAAGCCACTI GCCAAAGAAG
AGGAACCACA GAAAGAGAG CATCATGACC NGGAGAAAAA TGIGACTAGA CATGCTAACC TCCAGGINIT TATATATGAC
TTGAGICIGC TGIAATIGGC AGCAGAAATC CAAAATTIGI ATGGGTAGAC CACAA

SEO ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT
GGAGCCTGGA ATTGTCGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGA GTCCCCCTAC CCACAANCTC
TTCCCTGAAA GNAATNGAGG GGGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGGTTGG GGCTGCCGGC TGACCCGGAG
CCCCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCCTG GGCACCAGGG ACAATCCTCT TCCCCACCAC
CCGCCCTCAG GCTGGCATCT CTGCCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEO ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAACTCCCT CCCAGCAATC CAGATTAATT TAATATGCTT TCTTAACGGC ATTCCGCATT INICATTAAA GCAAATGAAC GTCCATCCCT CTCTGATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT GGCTGTTAAA AAAAAGAACA AAAAAAAGTA CCGCAAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT TCCTCTTCAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT INITCTCATT CTTTCTTTAC CTTCCCTCCA GGCCACCCAA CCCACATTCA GTGGCCCAAG TCACGTGGGG TTT

SEO ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCCATTA CCTTCTTTGC TGCTACCACA ACAAGGIATA TTAGCCCTTG AAATTAAAGA TGTTGCTGTC CCAGTTGTGC
TTGTCTTCAC CTAAATGCAT ACAGTCATAT TCCAAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTCATATAC
ATGAGCTCCC GTGTGTGGAG TGAACTAATT GCAGATATAA AATATTTGGG AAAAAATTTC ATGTGTACTG AACATGTATA
GACTTTTTTN CTTGTTATCA TTTCCTAAAT AATACAGAAT AATAACCACT GTTTACATAG CATTTACATT GTGTTAGGTA
TTATAAAATAA TCTGTACATA ATTTAAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTTATAT
CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

<u>SEQ ID NO:576:</u> (Length of Sequence = 410 Nucleotides)

GATGCAAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGGG CGCCTGTAAA CAAGTCCCCG
TGGGGTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTTGCCGAAT TTGGTCTTCG
CTGATCACCA ATTCTGGAAG GGTGGAGAGA CAGTTGGCTG GACAGCTGCC TGATTCGGCC ATGACCCTTC ACGGGTGTCT
GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG
GGACCCTGGC TNCCGGTCCT TNCCAGGGCC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC
GGAACTTTCG

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SEO ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAAT GECATATTIG AACATAAACI TAGGGCAGAT TITTACTACT TITGAAAAAA TGITGGAAAA TATTICTGIA
TGAAAACGIAA AACAACIITT AATITITTIT AGAAGITGAG AGGATICTAT TITGCAAAGC TGIATTATGA AGCIAAAGAA
TATGATCTIG CTAAAAAGIA AGIACAAACI GIAACATGIA TICTITITTIT AAAATCAATG CCITINCTCA TITNCTTCIT
TGAAAATAGGI AAAAATATGI CCITAGIAGI TCITCCTAAG TGIATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT
AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGIAATT AGIGITTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA
AATTG

SEO ID NO:578: (Length of Sequence = 406 Nucleotides)

CECTACAGGG GGGCCTGAG GCACTGCAGA AAGTGGGCCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT CAGAAGAAGC CTTGTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAGGA CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTGCAG AAGGGGAACA AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA CTCTTT

SEO ID NO:579: (Length of Sequence = 374 Nucleotides)

GIGGGCCIGC TCIGGAGICC ACAITCGIAA ATATTATGCT GCAGIAAATA TTAATCITGA GAACTAGGIG ATATGGITTG
GCIGIGGCCC ACTCAAATCT CATCTIGAAT TGTAGITCCC ATAATCCCCA CATATCATGG GAGIAACCTG ATGGGAGGAA
ACTGAATCAT AGGGCAGITA TITCTATGCT GTCCTCATAA TAGIGAGITT TCACTATATC TGCTGGTTTT ATAAGGGGCT
TTCCCCCCCIN CCTTTGCTCT GCATTTCTCT TTCCGGCCAT TATGAGAGGA AGGACATGIT TGCTTCCCCT TCTGCCATGA
TTGTAAGTTT CCTGAGGCCT CTTGAGCCAT GCTGAACTGT GGAATTTAAT TAAA

SEO ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TITCACATGA AAGGATTAA GTAAAGCAGA ATCTTTGATG
GTCTGCTGTG AATTCTTCGC AGTGATTGAG AAATTTCTTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG
GCTTTAGGAG TAAGAGAGAG AAGGTCTGCG TCCATGTTGG GAAAGAATAG ATATGCCCAC AATAATTAGT CTATTACTTG
TTTGAAAAGG GTGATTTCCT CGTCATTTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA
AGNAACTTCT TACAGTATGA TTCCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTTATC

SEO ID NO:581: (Length of Sequence = 449 Nucleotides)

SEO ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GTACTTGCAG TGGCAGGGTC CCGGACAGGG CCGCGTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG
GACAGTGGCA TGACCCGAGG GAAGTGGCGG CGCGAGGGCC TCAGGGGGGCT GAGCACGTCC TTGCAGAGGG GCGGAACGG

GINCTECTEG TAGTEGECAA ANACCTEGAA AACAATEGGE TNECTETTGA TGTACAGGTG GEGITTATTT TEATEGATTT ATACACACTG GAAAAGEETE T

SEO ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTIAAAGC AGCCATTCCT GCCAAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG
GGCTCCAAGT GAGGCTATGG GGTTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAACTAGTG AGCACGCTGA
GGGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGTGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN
AAATTCTGTA ACTGCATTGC ATTCAACCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTTG AGGTTCCCAG AGGAGGCAGT
CTGCTGAAGG AGTGCTAAAT ACTNGGGTCC AAGAGTATTT AGACCAGCAA GGTTTCCCCA CACAGATGCT GCGCTGATT

SEO ID NO:584: (Length of Sequence = 441 Nucleotides)

GITGITITIA AGGATIAAAT GAGATATIAC AIGIAATGIG CICATCCCAG TGCCCAGCAC ACAAGAAATG TICAATAAAA
TAGGAGGCAT AATIGICCIG TITGAATACT AGATAACCCT TITAATGGAT ATICIACAAT TATGAATCTA AGGIGCITIG
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGIAAGGA AGGIACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA
CIAGAGCTCC AAATITCCIA AAAAGCTIGA GCITCTITTA CIGIGGCCAC GCCTATAATG GGAATAAATC TGGITCITCA
AACAGTCCCT CCCCTCTCIA AGCICTGCTG GGGAGTAGAG ACATCAGCAG GCTGGITCIG TGNITAGCTC CTCCCCATCT
TMGACTCTCA TCCCCATCCC TCTTTCCTAC TACCCATTCA G

SEQ ID_NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TYCAGCTATT TNCTGCTTGC AGAGTCCAGT TAACAAAAGT GAGTNCTGGT ATAAAGAAAG TNATTTTTTT
TTTTTAAATT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCCTG CCTAGGGGTA TCACTTTGCT TTTGGAGCAG
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCGG GGGAAGTAAG CAAGTGCAGC ATCTACATGT
TAGTTTGGTA CCTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCTGTNTC TTTGTGGGGC ATGTGTACTT TGGGGTTGTA
AATTGG

<u>SEO ID NO:586:</u> (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATTNITC AAGAAAAAGA GCGGAGAGAG AGAGAGCIGC ATGAAGCATA
TAAGANCGCI CGGICCCAGG AGGAGGCAGA GGGGATCCII CAACAGTACA ITGAGAGGII CACCATCAGI GAGGCIGIIC
TCGAACGCII GGAGATGCCA AAAATTCIGG AAAGAAGCCA ITCAACAGAG CCAAATTTAI CCICCITCCI GAAIGACCCC
AATCCCATGA AATACCIGCG GCAACAGICA CIGCCICCAC CCAAATTCAC IGCCACIGII GAAACCACCA ITGCICGIGC
CAGINITCIG GGATACCAGC ATGICAAGCA GGCAAGIGGG GICINCAAGC AAAACTIGIC ACTICCCAAA AGCAAGIGCC
TATGCITGAC ANCCCAGGCC ITACITCCCA G

SEO ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCCACCT CAGCCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCCAGCTA ATTTTGTATT
TTTTGTAGAG ACAGGGTTC ACCATGINGC CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCCTCGGCCT
CCCAAAAGTGC TGGGATTACA GATGTGAGCC ACCGCATCCA GCCCCACACC CTCATTTATA CCAATTACCT GCCCAGTAAC
TGTGGACTTT TGCTTCCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTCAGCAC AGTCCCAAAG
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

AAGAACATIT AAGIAGITCA TACAAAGAAA TATAAATTGI NCITAAATAT ATCAAAATAT ACTCACCICA TICATAGIAA
AAGAAATAAA AAACIGIGCI CIGATGACAT TITICATCIA TGAGATITAC AAAGNICTAA AAATTGAGAA TATACATITC
CIATIGCCIT TGGATGGCAA TITIGGCAGIA ACTATCAAAA GIATAAATAT CIATACCCIT TGAGGIGICA ATCTCATITI
AAAGAATTTA TICITCAGCI ATGIACATAC ATGIAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GIAATGAATT ATAAGAATCT GAATTGAGAG CTAAAATATC TGGGTTGTAG GCCTACTCTG CCACCNTTTT NTTATTTGCA
AATATTAGAG CTGAACTAGA TGACCTCAAA GGCTCTAACC AACTCCAAAA CCTACAATTC AATGGCTGAC TGATATACAT
TGTATACTCT TTAAAAACAA TTAAAATCAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CACGTGTGTG
TGTATATATA TATATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCCATC
AGACACTTIN CATTTCCCAG GTCCATCAGA TGG

SEO ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCCAAC GGGGCCCTGA
TCACGGAAGA GGGCCCCCC AGCTCCAAT CTTCACACAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCTTCC
CGCCCACTTC CGGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGGT
ATGAGTCCTT CCTCGCGGGG GCTCGGTGGG TCCTGAGTAT TCTTTGGCCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC
TNGGGAAGGC CCCAGGAAAA GGCCCANAAG GGCCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGAA TAGGGAGTTA ACGITTAATC AATAGAGTTT GGGAAGATGA AAACGITCTA GAGATGAGTG GTGGTGATGC
CACATAACAA TGTGAGGGTA CTTAATACCA CTGAACTGTA TGTTTAAAAT GGCAAAAAGG GTAAATTTTA TGTTATGTAT
ATTTTACCAG AATTTTTTT TTAAAGCTTA CTGCATGGGG ACCAAGCGTG GTGGCTCACA CCTGTAATCC CAGCACTTTG
GGAGGCCNAG GCGGGTGGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTITIGETTI CIACCCATCA TCCICCICIC AAAGGAACCA GGGGICCITG GGGATTIGGC TEATGCCAGG GGATGGAGAG
TGICAGITIGG NICIGAAGGG GAGGCIOGCA GCATGIGIGT GGCAGGICAG ACAGACCCAA GAGCCAGCIT GGIGGGGCAT
CCCIGGCIAC CCIGGGGACA CAGTGAGCGC CGAACTAAAT AACATCAGGA ATGGNICACA ACGCAATGAG TAAGGGGAAT
CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAAINGCCAT GGCCACCCAC TITCCIACAG GAGAATGIGA CTAGTTGAGC
GTAGGAACAT GGGAACAAAT GGTAGAGGTG GCIGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACIGA AGGAATATAT GCAGCITAAT TITACATITI TIGAAATITI ATATIGCAGA AGIIGIACAT ATITICIGIT GIGAAATTAG AAAGANITGA CAGGCAAGGA GGGIGGICIA CAAAGCACIC CATAGATCCA CCATACIGAG ACAATGCITA ATGCITTGAT GGATTIATIT ATITIATACI TICIATGCAT ATGCATGIAT TGTATAAATA CGNATGCATG GITAAATAGA AATGGITCIC CIIGGIGIIC TGITIATCCA TITATIGIIG TGAAGIAAAT CCCCAAAGAG GIAGGITIGC TITIGCCIGA GGAGICITIT GCIACATACI GGCIGIACAT AATG

SEO ID NO:594: (Length of Sequence = 319 Nucleotides)

GAACATGCCC GTGAACTGCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGCTGTT CCCGATGAAG GTGGAGGACA
TCTTGAGGCC GCGGGGGGG ATGTCACACA CGGCCACCTT CACGTTGTTG GGGATCCACT CCACGAAGTA GCTGCTGTTC
TTGCTCTGGA TGGCCAGCAT CTGCTCGTCC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA
GCGGCCGTGG CGCGGGTCGC AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEO ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAACTA GTCAATAGTC TTCAAAGTGT CAAGGTCATG
AAAAATTGAG GAAGCATCCC AGACTGAAGG GGACTAAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTC TGGATTAGAT
CCTGGAATTG AAAAAGAACA TTCATGGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG
TGTTAATCTC CTGGTTTAGA TCATGTCCTA ATGGAAATGT TTTGTACTAT TTTTTTGTGGA CTCTTAAGGA ATGTGGGTGG
AGGACAGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

SEO ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCCC TCGAAGGCCT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG
CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCCTCC AGGGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTTGTC
CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG
CATTGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC
CCCATACAAG CCTGT

SEO ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAAACTT GGTTTCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACTTTAA GTGTGGAAAA GAGTTCAGAT CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGACG TGTTTCATTT ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTNCAAA CCAAATTATT TAATCAGTGT CCCCCCAATA AAATCACTTA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAG TITGGATTT NICCACGATG ACTCCTTGGG TGAATTTITA ATCAAGITAT TICAACCATT TINCTCATAT
ATTTCGTGCA TCCCTATTCT GGTATTCAGT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCCACAGC CCATAAGTCG
GGGAACCAGG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTCAT TGAGGGCAAG ACTGATGAAT TGTTCCTCTT
CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG
GAAGGNGGGA CCTGGGGGAA GAGGTGGGCA TAAAGTGAAG GTACAAACA

SEO ID NO:600: (Length of Sequence = 342 Nucleotides)

COGCCTCCIG GGITCAAGCA ATTCTCCTGC CICAGCCICC CGAGIAGCIG GGACTACAGG CGIGCGCTCC ACCACCACGC CCGGCTAATT TITGIATITT NAGIAAAGAT GGGGTTCTC CATGITGGCC AGGCTGGTCT TGAACTCCTG ACCTCAGGIC ATCCGCCCGC CTCGGCCTCC CAAAGIGCTG GGATTACAGG CGIGAGCACN CGCACCCGGC CAGCTGCTTC TATTTTAATC TGAACTTGGA AACACCTTCC TACTITAAGG CACAGGATCA GGGIAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACTT CAAATTTACT TAAGITAATT AA

SEO ID NO:601: (Length of Sequence = 319 Nucleotides)

AGIACIATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTTGCAACAT CTTGGATGGA ACTGGAGGTC ATTATGTTAA GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTTGCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC TCAGGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTTA TGGGTGGGG GCAGGGAATG GGGAAGGTTA ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAAGGGT GGCTATGGTC AACAATAATT TATAGTACA

SEO ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC
CGTTGTGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC
TGATCCTTCT CATATATATT TAINCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC
AAGAAAACCAT TGGCTCAGGT CTTCTGTGAG GAATCTGGAT TGTCACCTTT GCTGCAAAAA ATTACGGACT GGGGACTCTT
CAATTAATCT GACA

SEO ID NO:603: (Length of Sequence = 410 Nucleotides)

SEO ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACTIGG AGCATCAGAA AGGAAGAAG AACATGATAA AATGAAAATA
TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGIGA AACTTAATCG TATATTTATA TATAAGCATC CTTCAGAGAT
GCTGIGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTTCTCAG
TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT
TTATTTAAAA ACGCTTTTAT TGCTTAAAAN AGGCTAAATG GCCCATCTGA GCCATCGGCT TTTTTCCTGG CAGAGGGGG

SEO ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCTTAGA AATCCTACCA CCTCCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC
CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA
CCCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTTAC CAATGTGTCT
ACATACTATA TTAAAAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAAACACT ACAGTGTACC
TTAAAACATC ACATTCACAA CCCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

TECCTTCCTT TCTTCAATTC GAGACAGCAG TATCATTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA
AATCAAAGTT TACAGTAATA TCAAAGAAGA CTTGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT
TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTTT CCTTTCTGTA GTTGTGCAAG
CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTCACAGC AGATTCCAGG NTTTTGTCGA
TAAGATAGGA TGGNTTTGCC NTGGGGNCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA
ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG
CCCACACACAC GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC
AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAGTTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG
GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGGAACAG CTGGCACCTC TGGCAGTCGC CTCAGAGGTC AANCCAGCGT
NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAACTCTC CATCAAGTTT CTGCCTCCCC AACGTAATAT GGAAGTCGTT CTGCCTGTAG GACCCCAGCT
GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAA GGAAGCAATC GATGCTTTCA
TCGAGGGTGA GGAGTGGAAC AAGGCGAAGG TTGTAGCTTAA GGAGTTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT
TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGGACTCGC TGGTGGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT
GGAGCAGGGC CAGTGGGGAC AAGTGCATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG
TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

SEO ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTICACT GIATTAATCI TGATACTAAT TACTAAGGCT TITICTGIGGA CATTAAATTI GATCTGITTA
ATTGCAAATA CAATAAAAGT CGTGATTTAT GCTTAATGIT TCIGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC
CTGGTTTGIC TTGGTTACAA CTTTTGIGGC TCCAGATGCT AAAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC
GTGCCTCTCT CGCTTCCGAA AAGTTTTTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA
AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC
CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAAAACTC C

SEO ID NO:611: (Length of Sequence = 344 Nucleotides)

 GIACATATAT GIGIATATAT GIATATATCC CACATCTCCA ATTINCCTAT ACGIATATAC ACACATATAT GITATATAGG GIGIACAGAT ATAGGATATG TGIG

SEO ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TITTCATAGA TGITTAAGGG TIAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTTG GTTGTTGTTG TTGTTTAAAT
GAACTGAAAT GAGTTTGAGA GATTCATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTCAT
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGRGCT TAATTCCCCG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTIATITI TGTGGGIGIC GACITCCTAT GIGGGCTITI TGGGIGACAC TCCCTTAAGG GITCAGITTG ACAATTCINA
GAGITGICCI GCAGITGGAG GCCACCAGAG GIATCIAAGC TCCCTGCTTC CTATTINATA ATCCTCCAGC CCCAGCAGGT
CCACICCTGG TTCCTGTGIG TTTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG
GCCTAGAGCT TGTTGATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GINGGGGCNC
TNAANINCNN GGGTTTTTAA AA

SEO ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGIGITATI AACAATAGCC AGGAGGIGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT
ATACATACAA TGGAATATTA TTCAGCTTTA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA
TGTTTTGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTTAT ATGAGGAATC TAAAGTAGTC
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATTCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEO ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TICCITTACT GATITITIAA AATTGIGICA ATATCITCAG TGAACICITA ACAATCIGGG GAACIGITIT
CCICAATTAC CACITCAGCA ACGITCATAC GAAATCAAGG CITGCCITCA TGICAGIGIC AGGNICAACT TIAACICGAA
GGITTGIGIT TGICTCIAAC ATCITCAGAG TGAGCITIAG GGATGCCIGA AGGATGGACA GTACAAGCAA GCAGCIACIT
CCATGATACA GTGGGAAGAT AAAAAGGCCC ATTCAGICCA GCCGTGACCT GTAAATCCAG CTTGCCCTCC

SEO ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCCGC CCCCCAGGTT CACGCCATTN TCCTGCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTTNTATT TTTGGTAGAG ACGGGGTTTC ACGGTGTTAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTCGGGCTCC CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GIGGGGGTGC TGGCCACCTC CCATTTCTTT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG
TGTCCTTTCC ATTGGTTACT GAGGACCATT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA
CCTCTCTCCA TGTTGGCTIN TTGCCCCTGG GGCTGGCCTG GGCATGGGGG AGCTTATNTC CCCGACCAGG GGCTTGGCCA
TGINTCCTTC ACAANCCCCA CTCCCCGCGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCCAGGAG
CCCTCCCAGC CACGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTTAAG CTTCAA

SEO ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA
GTCCCAGCTA CTTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAATAA TAATAATAAT AAAAATAAAA GTTTGTTAGT
ATTAGCAGAT ACATATTACT AGGTACCCCC CATGCTCAAT GAAGTGTTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG
GTGTGACTTC CTCTGGAACT GCAAATTCTT TT

SEO ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAAACG ACCCCACAA GGGGGAAGGC CCCAAGTGGG CCCCTGCCTG TNGTNCTCTC TGGCTCCAGA GATGTCTGCA
TAGGCCTCAG CTTCTCACTG GCCAATCTCC TCTTCATGGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTTGTGT
AAGCTTGCTC CCCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGTT
CCTGGGGCAA GCCAGAGCAT CACCTGTCAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT
AGTGTGTCCA GTATCCAGCA TGGNGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TIGTTCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC
CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGAT AATTTTTTTTAAG
TAGGACACGG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCCC ACCTTNTGCC
TTCCCAAGTG CTTGGGATTT ACAAGGTTTT AAGCCACCCG AATCCAT

SEO ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GENTCCTGGG GCAGGTGTTC TGGGATCCTG GACAGGAGGG TCAGGTCGAT TTTAACCCAG AGAGACCTGA
TCTCATCACT GTCCTTTAGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGGG ACCAGTGTGT AGAACTGCTC CTCCAGCTCC
TTGGCGATGT CACTNGTGGT CCTGGCGTTN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCCNTTGG CAGGGGC

SEO ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CITCITCAAG GIAAAGCAGG ATGITGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC GAGAACTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA ATAAATG

SEO ID NO:623: (Length of Sequence = 315 Nucleotides)

SEO ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGITGGC CAGGICICGA ACTCCIGGCA TCAGGIGATC CGCCCGITTC AGCCICCCAA AGIGCIGGGA TTACAGGCIT GAGCCACCAG GCCIGGCCCG TTACIATTGI TATITITAAA IGCATIAGIA AAAAAAAAA AAATITTAAT IGCIAGAACA TTAAATATCA ATACCCACAT TAATAAAAGC TATTIGGGAG CCITAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA AAAAGITTGA CITCACCAGG TGTTTGAACA CTACAGATCC CATCITGCCC ATGAAGCTTC CCTAGACATC CCCACCCCAC CGIGCTCCNT TCIGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEO ID NO:625: (Length of Sequence = 305 Nucleotides)

GITCCIAGAT TACICAAATT TAGIACICIT CCATCITTIC TIGITGCTAT TCTTTIAAAA TCACAAGAAG TCCATAACIT
AAGIAGGAAT TIGIATAATG TAACITATIG TGAGIATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CITGAATGCA
TATTTTINAC ATAAAAATAG CAAAAAAAAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTAGTINGA NITACAGAAT
ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEO ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG
ATAAGATCTG GAAGAATTCT TTGGATTTCC AGACATAGGC TCTTGTNCTC TTCCCCTTACT TTCTCCCAAA CAAATGGCAT
CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAACTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG
GGACTGTGCT AGGTCAGACC TGAAGTCAGC ACACGTTGG GTCTCACCCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCINCTGC
TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCCACA AAGTTGATCC AGCCCAGAAG AGTTGCAGGG ACAGTCAAGA
AACCAGAGGT GCTGCCCACA TCCCCATCAC TCCCTTTCCC AACTTCCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA
CCTGAGATAC TACTGTNATG GGTCCCCGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA
CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ: ID NO: 628: (Length of Sequence = 310 Nucleotides)

TITITITITI TEAGACAAGA GICTCACTCT ATCACCCAGG CIGGAGIGCA GIGACATAAT CATGGCTCAA TGCAGCCTCG ACCICTCAGA CICAAGIGAT CCTCCCACCT CAACATCCCA AGIAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT TITINACITT TCIGCAGAGA TGGIGITTCT CCATGITGCC CAGGICGGTC TOGGAACTCC GGGGCTCCAG CGATCCTCCT GCCTCAGICT CCCAGAGIGC TGGACCCCACA GGCATGAGCC ACCACACTCA GCCCCAAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

OSCAGAGGA AGGIGGAAA GCCAAAGAGI ACAAGIGAGC GAGCCCTTTT TGTGATGGGG TIGATCTGTT TACAAGGGGA
CTGCCTAAAC ACTITCCATT AGCCCCCACT TCCCAACACT GITGCAGTGT TGCAGTTAAG TITCCAACAC ATGAATGCTG
GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTTGGGA AAGGAGGTTC TATTTTAACT TAAGTAGCTT
GAAAAAGCTC TTCAAGGAGI TGATACAAGA ACTGAGATTT GAATTAGAGG ACCGAGTAAA GTGAAGAATC TGCGGGCAAA
GTCCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTCACATTT
TCTTCCACTC TCTTCCTCAG CACATCTCCA CCTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAAA GGAAAATAAG TCATTACATC AAAAACACAC CTGCACACAT ATMTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA GTGCCCATCA ACCCAATGTA GGG

SEO ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTIINACA TATCAGIAAT TETTITITATA ATTIGIGGIT TINATGAAAC ATTIGCTATGC ATTIATTAGG AAAAACTGAA TITCCCAACA GGIGAACTGA AAAGNIATIT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT AAAAATGITT GCATTAATCN ATAAATTCTT CCNGCATTCC TTGGGCCNGN TCTGGAGGIG G

SEO ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACIT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCCTTACCAC AGGACTAAAT CCAAGCTTGC
CAACTTCTCA ATCTTTGTNC CCTTCTGCTA GCAAAGGATT GCTACCCATG TNTCATCACC AGCACTTACA TTCCTTCCCT
GCAGCTACTC AAAGTAGTTT CCCACCAAAC ATCAGCAATC CTCCTTCAGG CCTGCTTATT GGGGTTCAGC CTCCTCCGGN
TCCCCAACTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGACTCAAGA
AAAGACCCAT ATCTCGTCTA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GETCAGACCT GAAGCCGGCA CAGCGCTGTG ACTGCCCAAG ACCCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CINTCCTTCC CTTCAGTGCA GTAAGCTCCC
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC
TGTTCTACCA TCGCTGAGCT GGCACTGAAT CCACCCGGCA AATCCCTTCC CACINTCCCC TCCCCTCTIN CCCAGGCAGG
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEO ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGIGGIC TACCACAGNI TAAGTAACGG GICATATT: GGAGTATCACA CATCTCAGIC TIGIAGAAAT TAGGNACAGC
AATTAGGAGI CATGCACATA TANGAGATGI AATCCCACCC TITIGACIATA GCCTACTCIT GINITITACA GAAAAGACTG
TGGNGGAAGA AAACCCITTA CCCINTINIT CAGGGAGAAA CINACANCAC TCANCIGCCI GGCACTGAAA AINIGGCATC
CAGICCACIT TACCATCAGI GITTAAGGAA ACCATCICIG GIAAGC

SEO ID NO:635: (Length of Sequence = 226 Nucleotides)

TIGGGATGAT GCTITTATTA AACGGAAGCG TCCAAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT
TTCAGGGCTC CCCACCGATA GINATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCTCGA CGACTCCGAT
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCCTCCACTT CCATCCTGGG NGTGCCCCTC CCCTCA

SEO ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TOCAAAATGG GCAAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAAA CAGCCAATAA
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCACGITGCT
CCCACTAGGN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAAA CTGCTTATCA GTTTGACCTC GGGAAGTTAA ACACAGAAGT
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEO ID NO:637: (Length of Sequence = 384 Nucleotides)

TICATAAAA TITTACITAA AATCIGIAAC GCIAGATATT GACTATCCTT AGITGAGICA CIGAGGITTA AACACAATGG
TAAGICITAA AGICIGCTAT TIACAGAGCA TIGAATCIGI ACCAATTIGC AATAGAAAGC CITCAGTATG CAAGAAGTIT
GCATGGGIAT TAAGAACACA GCCIAAATAA GGCATTIGAT CIAATCIGCA GGAAGAATTT TCITCCCCAA AACAGAATTA
TAAAAGCTTA CITTAAACAG GAGGCAGAAT AATTCITTTA GGAAACCATT TCATTCIGIT TCIACTAACC TATACCATCT
GAGGAATTCT AGGGAGGATA ATAAAANTCT CGIGIATTCC ACAGCAAACT TACATACCCT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTIC ATCAGCICIT GITTCCICTC ATTCTTTITG ACCITGIAGA TITATCCITT TITCTTAATT TATTCTCACT
TAATGGGATT TCAGGAGCAT ATTGACTAAG TITTCATTIT TACATGIATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC
TTAGATATTA CTGATGIAAG TCTACTITGA ATCAAATGAA CAGATGITTA AAAAGTATTG TICCCAATTG TITTAATGAT
TTCINCCIGI GAGITGGGGI GGIGCTGCCC ATCACCAACT CAGGACGGGI ATTTGAAAAT ACCTGGGNAA AATTGTAACA
ATGICTGGGA AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG
GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GETTCTACTC ACGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC
TCCAACAAAC GGCACTCACT GGTGCAGACA TTGTCGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG
CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGG

SEO ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTCGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCGGC TCGGCTCACT GCAACCTCTG CCTCCCCCGG
GTTCAAGGGA TTCTCCTGCC TCAGCCTCCT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTTCTATT
TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTTGAACTCC TGACCTCAGT TGATCTGCCT GCCTCGGCCT
CCCAAAGTGC TGGGATTACA GGCGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGCCCAGT ATGGATGGGT
TTTACACTTA TACTNGAAAG GTCATCCTTT TNAAAAAANG AACCTTTAAA ACCATTAACT ATATATAAAA ACTATATT

SEO ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTITNA GCAAAATGAT ACAAAACINT NITAACCAAG TAGAAGATIG GTAGTITACAG TGGAATOGIC AGGGAGTACA
GGGGGGCCAC CACTGGAGGC AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TNTGCAATTC TCTCTCTGCT TTTNTTCCCA
GCCCCGTTAC AACCGAGTTC ACGTGGGGGGG CCGCAGTGCA GCCCCAGCGG TGGCAGCTCT TGGAGTCTGT CCGTTTAGTA
TGTTTCCCCC ACGAGCGTCG CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTTC GATCCTAGAC CGGGGGGACG
TGTCACTAGG TAAAGGCCAT TGGGTAACCA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCCTTTCACA GCAATTAAGG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

SEO ID NO:643: (Length of Sequence = 325 Nucleotides)

GGIATCITAA AGCCITTCAG GGATTICAAT AGACACAITT CTITAGCIGA AATCIATICI CICAGAAACT TACCCAAACT
TCITAATAAT GINCAAATIC TAAGAAAGAT ATCATGGCIA CACAGCACCA GGNAGAGCAC AITATITCIC TICACAATIC
CCITGCATAG CATCATGGCI TCCTAAGGGC TITTAAGITT ATTGCTTCAA CIGATTCTCA TAAAATCTCT GAGATGCTAT
CTGGAAAGTA TIATTATCCC CAGITTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG
TGGGC

SEO ID NO:644: (Length of Sequence = 373 Nucleotides)

CITCACATCA GCAGCOGAC GAGGIGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTTGATTGT
CCAGAGAATC CIAAAATGAA GITGGATGGA AAACTTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT
AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTCACAGTT CAATCATCAG GCCCGAGGGC TGGTGGTGAA GAATTAGATG
AAGGIGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCINGAAGG ANCCAGAGGA GCGAAGGATG
CAGATCACTG CACCOGTACC CCAAAAAATTG GAAAGTCCCC TCACAGGCCA TIT

SEO ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTTCTATA TTTAGCTGTT CTTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TTAAAATCCA GTGGGATAAA CTATATGGGG

SEO ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAAANCTG
GAGTGIATGT CATAACAAAT TINCTCCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT
TTGAGTTACT TTTTGIATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC
ATTTATGTAC ACGGTAATC TGTTTTGATT TTGTGTGTAT GTTAAAACAT CTTTATTATA GTATTNTGTA AGAGTAGGTT
AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

<u>SEO ID NO:647:</u> (Length of Sequence = 226 Nucleotides)

TTTTGGCGTC AGATCTGTAA GTTTATTTGC TCAATGTACG ACAGCTACAT AATGNCTTAC ATTCATGATA TTCCATCACT
GAGGAAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA
CCTTAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

SEO ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAG TTAAAACTT TACAAAACAA CAAGTTTCC TTAAATTATG ATTIGITATT ATAAAANCTA GTAAGAAAA ATTCCACCAC ATGAAAGCAT TINCIAAAAT TCATACCCCC GTACCTATIT TTAANTACAG TTGGTAAATT GATTAAGCTC TATITNCATT TIGANTGATC ATCGGTTTTA TTTTATIT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCIGCAG CCATATATGA GGICCCTCAT GAGACITAGC AACAAGGIGI GITTTAATGI GACAGIGIGI CIGATGIGIC CCCAGCACAT TGGGACCAGT ACACAGIGIT ATTIGIACAT CIGCTGAGTA ACATTGAGIG TGIGGGTAAC TAAAGCCCTC AGIAATTATT TTACTTAATG TTTTCAAGCT TAATTCIGAT CITGTACTIG CATGATITAT TATTCCTTGI GCTAAATTCT TCAATGITCT TGCCTTGATT GATCTGICAT TATCTATCAC TTAACTAAAA TANTAAATNC CTTTAATTAA GTCATGGITA AATGAGGGAC TTTGTTT

SEO ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGITGAAAG GAAAGGTGAC AGGAAAGATG TGITIAGCAT CCATGAGCAG CIGGGGAGAG TCTITCCTGT CTCGIAAACG
CATCIGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTITGAAT CTAAAAGACT TINITCTACT AAAATTICTA
CCCTCAAAATT CTCAACTAAT GAAGANTGIT TACTITTGIT TTAAACTCAC TTCATTITCC CAATTAACTA TTATCAAAAA
AGTTAGIGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEO ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGIAA ATTITIGCTT CIGGGCTIGT CATCAGGAIT GCAATTITNA GATTAGITT GCTAATIGIT TGGCCTITGA
AAAATTATAT ACACTIGGIT TGITTIGGIT TICTIAAGIC AAAACAAGGA AATAAAATCA CATTIGCTIT CCAAGAAAAG
ATAATGITTA AGIGGITGIT TAGIGITTIG TGICTITGGG GGIGGGAGGG GGIGIGIGGA ATACACAAAC ACACACACAC
AAAACACACAC AGICTATATA TAANCTTATT GGAGCCATCA CTATATTITA AGGAAAATGN AAATAATCTA TIGAAGCTIT
AAAATTAGGA ATTITIGATT TAAGCTAAGG AGCCTATTIT

SEO ID NO:652: (Length of Sequence = 353 Nucleotides)

GIGGIGGEN CCIGIAATCC CAGCIACTIG GGAGGCIGAG GCAGGAGAAT CGCITGANCC CICGAGGCAG AGGITGCAGI
GAGCCGAGAT CGAACCACIG CACICCAGCC TAGGIGACAA GAGCGAAACT TIGCCGGCAT TIACACICIC AAAAGAITTA
ACGCAATTAC AATCAAAAAA CACITGICAT ATATAACACT TITTCACAIG GAAATAAATT GGIGGITTAA GGIPTACAAT
TCCITTGAAT AAAAITTCAG TIATTAGITA CAAAATGCIA AGACAGAITG AGGICTCAAA GAAAGANCIT TGAGGAAAAT
TIATGGITT AAAGGGACIT TCACCAAATA TGA

SEO ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA NIACTITATI CAAAACCCAI CACAGAAATG GACAGCITGG GICTGIAACA AAGCATTCAI GITTIAGNGC ATAGGICAGI AATTGIATAT GAGAGCATAC ACTGCIACAI ACAAATTAAC TGNTCAGACC ACAACTITTC AATGITTAAA ACAGNATAAG CITCCCIGIA AAAGCAGCAC CITTIGIGAC GNITTAACIT TAGIATICCI CICC

SEO ID NO:654: (Length of Sequence = 353 Nucleotides)

GICAACTCIA TITICCATAT GAATTATIAG ATTIGGIGCI GICTIGIGAA GIAACTIGAT ACGATAGATG TGIAGIATGA
ATTITGICCA CATGGIGGG CCCITGGCAG AACIGCACGI ACCIGAAATG GITCCCTAAT TITITICIAG TATTACTATC
CAACACTICC TCICATAATC ACTAGIGIAT TGIATAATIG TIAAGIGICC TITATICATA TATTIAAATT AAAAGAATAC
TCIGGIAGGA TITIGAGGGC CAATAGIGIA TITICCACTGI TIGAGGTATI AGGAGGGCTA TITACIGATA CCIGIAGIGC
CTTCCCATTC TGGITTATCA TGCACCTCTA AAT

SEO_ID_NO:655: (Length of Sequence = 365 Nucleotides)

GAAACINACI TCACATTICI CCAGGGAGGG ATGCTITGGA AAAACIGCTC AGIGAGATGA AGCACAGATC TGCTITINAT
CCCTITTGIA CCTITITAAA GACATAAGGI AIGITTIGAC ACIGGAGIAT ATATGAGGGI TGCTAACGIT TAGGITGAAA
GAGCTGCTGT TGICCACAGC TIATTIATIT NCCACCCATT TTTGICTCCT GGICTCATCC AGITACATTT CCTGGGATAT
GTITTTGGAG GTTGCTCAGA TCACGGCACT AGAGTCCCTT TGGGITTCTC CTCCCTCCTC TGTCTATTTG GCCTCGCCCT
TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

<u>SEQ ID NO:656:</u> (Length of Sequence = 372 Nucleotides)

GTCATGAGTC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG GCGTGCACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG COGAGATOGO TOCACTICAC TOCAGTOTIG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAAGG GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEO ID NO:657: (Length of Sequence = 334 Nucleotides)

GEITETGAA AAAAAAACCT CCAGATAAGA TTETGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTTACTTTC
CTGATTGGGG ATTCTATGTC ACCTGATTCA GATACTGAGC TTCGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA
CACCAAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG
AGTCTGATAC ACAGAACATG GTTTCTGAAG AGCCCTGTGA ACTTCCCTGT TGGAATCATT CAGACCCAGA AAGCATGAGC
TTATTCGACG GATA

SEO ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TECATTICIT TETEGATATT GITGAACAAA AATAGCATTC AGITTACCCN CTAGTECTAA CAGAAGNENC TCAAGCTGIT CCCCCATCAT GGGNGCAGCC CITAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA AAGCACTTTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCENCIN TGCCTGGGCA CAGATGAACT GCCCTTCAAG GCAATCATCA TCTTTTTTCT AATAGGGAAG GTTTGG

SEO ID NO:659: (Length of Sequence = 321 Nucleotides)

GGICITIATA TGITICCGAG ACAGGACIGA AACICCCIGC CITCAAGICA TITICCIAAG TAGCIGGGAC TATAGGCIGT
TICITITITI AAAGGAAGGA TITIATGITI AICATGAAGG AAAATAA AITIGGCIAA CITAAAGAGI TATITATCAG
GAGACACIAT TAAAAAAAGG CAAAICAGAA AITIGGAGAA AATITITIA ATACIGATAA TAAGACAGAA TIGIACCCIG
TAACCATAAA TATGIAGAAT TICIACCATA TCAATAAGGI AAGITICI GIIGCICCAC ATCCICTIGC ACGGIIGGGI

SEO ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTTAAGG ACATAATGIT TITGACTGGG GATCATGITT GGCTGATGIA AATATTAATG CCAAAATAGG AGCTAGGATG
AAAGTAACAC TGTAATTAGT AGTAGAATTT ATTTCATATT AAAATGIGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC
AACAATTTTC AGAGTGCACC CTCATTGATG CTACTCACAG AGACGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCTAC
TACGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEO ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGIGCAAGGG TAGIGGCACA TITTATTTAT
TIGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TIATCCGIGC ATTTCTTCIG CATTCMTAGT
GAATCCTTAC TGGGGMCAAC TCATTCCATT TGGCAACAAT CTTTAATGGM CAGGCAATAT ATAACATTGC TGAAGTCTCT
TAGCACTAA

<u>SEO ID NO:662:</u> (Length of Sequence = 340 Nucleotides)

TTTTTTTTG GCAGCCTIGI AAGGAGAACT TCACCATTIC CCAGCACATC CCTATGIGIG CGCCTATTIT AATGCACCTC
TCIGAAACAG AGACCTTTIT GITCACAACC ATAACTAAAG CIGGAAAGTC AGICTICAGG CAAGGCGAGG GAGGAAAACA
TCCCATTAGA ATTTTTTCAG GAAAGACITA TGGNAAAAAA TATCTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT
TTCCCACTGT AATCAGGGTA ATATGCATTT NTAAGINCTG ATATGIGATA CATTTATGTG ATGGCAAAGA TAAGTCTGTC
TTGCATGCAG GGTACTAGAG

SEO ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CIATGAAATT AGCIGGGGAG ATACIGICCT TATTITICAC AGCIGAAGAA ACCAAAGCIT TGGGAAGITT GIGAACITCTC TGAGATCACA GCIGGIGATA GAAGGACTG GGACACGCGC TIGGGITGAC TGGCITCTGG TITTGGITCT CIGGCITCTA GIGCTICTAG AAGCCCCCCC TITTCCCTCTC CITTCCCTCAG TAGCATCTGA CICTITTCAT AAGCAAACAG CIGIATAAAC AAAGCCCCCA TITTGGICAA GCACAGGGIG AATGIGATAT TIGITCCCAC AACCTTATTC TNCACTCAAC AGCCG

SEO ID NO:664: (Length of Sequence = 300 Nucleotides)

TTGCTGAGAG AGATGATGIT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC TTTAGGCAAG TCAGATTTGT CTTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCGTAGGAG GGAAGTGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGGA GGCAGATGTT TGTGGGTGGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCITAAAAA GTCTAGAAAT TATAGACCGA TIGAGGTCAG
CAAGAAACAA ATTATTCAAT ATATCCCCTG AGGGCTAGAG CCAGACTTTC CCCTATGATT CCAAAAATTAC TICGCAGTIT
CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC
ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGYTAGAGGA ATGAGGAGCA
AGAAGTA

SEO ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTTGAGCTGT TCCTCAGCCC CCTACCCTAA CTCCCTCCCT ACTGTTGATC
AGGCTGGTCT CTAACTCTGG ACCTCAGGTG ATATGTGTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC
CATGCCTGGC CTGGGTTTTA TCTTAAGGTC TTTGTGTTGC TGTTCCATCT GCATGAATAC ATTTNCTTCA TTTACTTACG
TCTTAGCTTA AATGATACCT CCTCTTCTTT CCTACTGCCA TTATCTTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEO ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCANT NCAACGCCAG GNGTTTCCTG ATGGGTCAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC
CCTACTCTAC CTTCTACCCA CCCTACCACA GCCCTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG
TCCATGAAAC CCTACAATTA TTGCAGTGCG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCCCTCAGTT
TGAAGGTCCC TTAAGTCCTC CCCCAATTAA CTATAATGGG GATATTTT

SEO ID NO:668: (Length of Sequence = 212 Nucleotides)

TONTITCINI TICTIATCIA TCINCITCAC CATGIGICIT CGGGGCCIGG AACATAGIAG ATGCTCAATA AATATTGATT GAATGAATGA ATGAATAAAT CINCITACAC CICTCATGCT TCAAACAGGG AAAGGCTAGA TTATTTAGAA GICTTGTCGG GGATAATAAT NAGCTCAGIG GAAGCCCTCT AGITCTCACT CGAGTTTCTC CC

SEO ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTCAA CCCIATCAAT AAGAIGITAT GAAAGAITGG TICICTIGIT TACAAGIAGI ATAGAATCIT TITIGATCIT
TGACTCIGIG CIGCCIATCI CATCAAIGIT GIIGCIATTA ATATCIGICC TITAACACIG GAIGIIGGGA TCIIAGIAAT
GIIGCIGATA ATAGGAITIT CAGCAAAACT TCCATATCCC TIGAAGATAT GGIAGITTAT ATTACTATAT CGATAACAGT
TTIGCCIGIG GAGAITTGAC TAGIITTAGG TGIITIGGAAG C

SEO ID NO:670: (Length of Sequence = 234 Nucleotides)

ANTANAGITG GGATATITGA TIGITITCTI TICTGATCTI TATGCTGACT GCAGTATCAG ATACCATITC ATTGTTAAA
AATCTTCCTI TITTTTTTTT TITTTTTTTTG CATTTTGCTC TITTGTCATT GITTCAAAGT CAAGTTGATG GCCNCAAAAT
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGCCAG CTAGTTTTAT TICTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACTCTT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANTTC CTTGAAGGCT CAGNACGTAC AAAANTCAGT NITTNIGGCA
GAAAGCACAT CC

SEO ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACT ACTIACICAA TCCTCTTGAA ATCIGCCTIT TGTAATGIAA CTGATAGGCC AGCGTTTCT TTCACTGTGG
GAAATAAAGG CTACTTGGTT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT
AGTCCACCCT TAATAAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT
GTTTAGACAC TCTCCCTTCT AGTGCTTGGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEO ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TEGCCTCCCA AAGTGITAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGITGIGTAC TCTTTTAAAT
ACTAAGTTTT TAATGITAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTAAAAACAT
TGCAATTGTA CTAGACTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCATT TCTTTCATTT
AATACCTCTG TAAAATGAAG CAGTTACTTC CATTTTCCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEO ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTITIGG AGGCCGAGGC AGITIGGNICA CCTGAGGITA GGAGTITIGAG ACCAGCCTGG CCAACAGGGT GAAACCNGIN TICGICTAAA AATACAAAAN TIAGCCGGGC GTGGINGIGC ATGCCTGTAG TCCCAGGTAC TCAGGNGGCT GAGGCAGGAG AATCACTIGA ACCCGAGGIG GGGCAGGNGG AGGITGCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGIGACAG AGTGAGACTC CATCTC

SEO ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGICATIT TAGACTCICA ATITIAAATT AATTITGAAT CACTAATATT TICACAGITT ATIAATATAT TIANITCCTA
TITAAATTIN AGATTATTIT TATTACCATG TACIGAATIT TIACATCCIG NIACCCITIC CITCTCCATG TCAGTATCAT
GITCICIAAT TATCTIGCCA AATTITGAAA CIACACACAA AAAGCATACI TGCATTATTT ATAATANANI NGCATTCAGI
GGCTTITITAA AAAANIGITT GATTCAAAAC TITAACATAC TGATAAGTAA GA

SEO ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTIGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTNCTATCCA
AATCTGAACC CAAAGTGCAG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG
TTCAAGGGAT GGACAGGAAT AAAGGAAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

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AAATATAATA TCAAAAATCA CIGCIGAGCI CINCIGGCCI TCCATACITA GCTCACCCCG GCACTIGAAA TITCCACITA CTAATACAAA CIGCICCTCA GGAAGGANGA GATTACITTA GNAAATCCIT GCAGGATGIT CCIGICTATG GT

SEO ID NO:677: (Length of Sequence = 333 Nucleotides)

CCCATGCTAA TITAAAGATA TACAGGAAGN GAAAAGTAGG AGITAAGTIG GAIGITGITA GAAGITGGAT GITAGIATTA
CCTTCAGGAA CAGATCCCCA TGGCATGICA CAGGCCITAA TIATATACCI GGCTITCITA TIGICICCAC TITATCATGA
GGACAAGGIC TIGGTITCAT GGGAGGAACT TCTCCATTGA AATAAATGIC TGCCATGICA GCACCGITIG INCCCTCAGI
TITAATATAA TGGACCATAT ATIAAACATN ATIAAACATA INITTAAATN TGGIGTCACT AGGIAGATGC CCCAGNCAIC
CTACTICCCT CAC

SEO ID NO:678: (Length of Sequence = 359 Nucleotides)

SEO ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGGN TCACTTGAGC TGGGGAAGTA GAGGTTGCAG
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAAA AATAAATAAA GANAGAAAGA
NIATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACTTAAG TCTTAATTTT GGTTACAGAA TTAAATATTA
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GCNAAAGAGA GTGAATGAAA
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT
GGTCACCTAG TGTTGTCCGC TGAAATTTGG AGGGTTTAAT TTTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG
GTGACACATG CTGCACGTTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT
TTTCGTNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEO ID NO:681: (Length of Sequence = 345 Nucleotides)

GECCTEGIGI TIGECTEAGG TECACTAGGA COCCTEGECG TEGTETACTE GATEGEATCA GITCTEATEG GICANATGIC
CATICITAACA GGITGGIGCI GGAGAGGGAG CAGITGITAA ATATCITTAC TATCICCCCI NCICCGGACA CCIAGATGCC
CAAATATACA GCACGIAGIA TOGAGGCAGG CCCITITGAT TGACATCAGA ATCAGGITTG CAATGGAATA GGAGCTITCC
TICCTCCTGI CACTITAGCC CCAGGCTCCA CCICANAGIC TGGAATGCTC ATACCTATGG CAGGIGACCI TGIGTAACAG
NITGGGGTTA ATGCCATTCI GICCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTC TCCTAGCATG ATGCCCACCC CAAGGIACTT ACACGICITC AACAACACCT TCCGGACAGC TTCGTGGTAT CTTGTGTGGC TATTCTGGTG CACGGAATAA TTCCCATCTT TTGAGATAAT GGGGGGAAGC CTAGTAGGCT

CTGGTTCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCCTAG NCACTCACAT CCAATTTTCA GG

SEO ID NO:683: (Length of Sequence = 329 Nucleotides)

GATITIAAAT AGITAAAACA TITITITIAAA TCCATAAGTA ATICTTACIC TACICATTIA TACACACATA TACICACATG
TACACAGACA TACCTACACA CACACITATA AATACATGTA TACACAGAAT ATAGTAAGGT CITITATCCC TITICAATGA
AATAAATATI GIATICTATA TITAGNATAA ATAATGTIGA AAAAGTGATI TIGGAGAAAG GITGAAATGA TIGAGTCTTA
AGIGTGICAA TGTATAATCT ACCCCTTTCT AAACATCGTG TITTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT
GTGTTTAGG

SEO ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGCTG ANTIGAGATT ACACTGCCAT GATACATTCN CIGACAGCAC TICACATTTI CCCTGAGTTG GGGACAGAAA
TCACACTGCC CAAATACATT ATCTGATGGC TCCTCATGTT TCCCAAAAGT TAGGAAAGGA GGTTCTATAT ACATACATGC
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGIN
CCATCTCTCT NTINCCTACC CCCTGCATCT GTCCCTTNAT A

SEO ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTITIAATA ATTITAAACT AGCTACAAAA TGTCAATCAC TTCACAAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA
CATGCTATAA TGATATTTAT CTCACAGTTT ATATTTCATT CATTTATATT ATTITITITAA AAGGTTTCTT TATCAGCTAC
TAAACATCTC AGCAATTTGG TGTGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT
GGTGGTTAGT AAGAGTCAGC CTTATAAAAT TTACATCCAC ACTGTTTTCA CAGCAAGNIT GCTCTCTCCA AAACGGTGGN
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CEAGGAGAG GAGGAGAAA TICCCCCAGA TICGGCAGG CCCGCACCCC ACATICCGIC CIGITITGAG AGGAGGAGGG
AAGAGAAATA AACGIGGCAG CGCATAGAAG GCCAGCAGGG AGACIGCITT CCAGACACCT CCGGCCCACA CAGCCGITCA
CCCCCCGITT TITCAGTCCT GGAAAAGGAA TICGGGTCTG TITTCCTTTT GGGCTCTGTG CAACINCAGC TACAGTGGAA
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TNTAAGCCTA AACTINAAGA GCCTCACCCG
GACGAGCAGG CAINCCTTAA CCTTAAAGCA ATCCAGITTC ACGGCCTGGT TCAGTGGAAT

SEO ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACITCCC CICITITATE GAAGCATAGI AAGATTITIC CITTATEGCG ATCATGATEG AGAAGTATAT GCTACAGGAG
GWAAGGITCA AATTGCAATE GAACCTCAGE CACTATATGA TGAAGTAAGA NCINTECCAA TIGCAAAGCT GGATAGGACA
GITGCTGAGA AAGCTGITAA AAAATATGIA GAAGATGAAA TGGCAAGGCT CCCTGATAGA TIGTCAGTAA CITGGCCTGA
AGGAGATGAA TIATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

SEO ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGICATAA GGCCTAAATA TTAATCCAGT CIGIGACAAC GACAAGGIGA ATACAAGCCA GTCTCTACTT CICIGGGCCT CIGITTICIG CACTITATAT AAAGATIGGG CAAGATGGIC TAACTTAAAT TITATGATIC ACTAACTIGA TITITGIATGG GGCAGATTIT NCTICGATGA AATATTAACA AATAAGNCAC TCAAATAAAT CAGCAATGGG GIGCAGATGA GGACTACCGT TICTACAGCA AAATATGGGT GAACTCAGTA AGIGTAGGGA CACAGAAGGT AATGCTGACC TCTTGCATAG CATGTATGGG ATATTAAATC ATTTCCTGCC TTCCATTTCA GGGGTGAGGG AGGAACAGCT GTTCCTGAAC TCTTTTAAGG

SEO ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTIAAGIG TIAGCATTIC TAAACITGAG ACTCTAACAG TAAAAATAAA GIAATCIGAA ACCTGITTCC ATGGGIAAAA
CACTCIGCCI GGIATTCITG TACACAAAAT TIACTAAATA TGIGAATATC ATAAAATGAA AATATCACTC CCITCAATTT
CITTGGCCTT CACAAATTCA ATGIGACIAT GATCCTITTC AATAATACTT TCAATGACAT TGIGCTTCIT TAGAAAAATC
ACTTAAGITG TAGCATACAA TAGITAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TITTTTTTAAA AGGGG

SEO ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTI NAGAAGCAAT TGAAAATGCA TCCATGTATG TNATTTGAGC GITACTAGAA ATTTATTTAT
ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG
AACTGCACAT ACAATGGTGG CCCCATAAGA TTAAAATAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT
AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT
GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTCCT
TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTAAAAAACCT CACAGCTTGT ATAATGTAAC CATTTGGGGT
CCGCTTTTAA CTTGGACTAG TGTAACTCCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA
TTTAAACAGA GGTCAAGCAA TAGGCGCCTG GCAGTGTCAA GCCTGAAACC AAGCAATACC GTCATGTTC AGCCAAGCCC
AGAGNCCTAA GGTTTACAAA CAAACTATGG NCCGGAACCT CCTCAAGTTC T

SEO ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTINIGA TIATIGATAT TAGAAATGIT TAAAATTAAG ATATTAACAT TICATGAAGC TGAGIGGIGA GCACACCAGI
TITATATTCI CICITATATAA CITTGIGIAT ATITGAAATG TITTCICATA AAAAGTATIT AAGCAAGTIT AGGAAAGAAT
ATIGATAAAT GAAATCTAGA GACCATCAAA AGCCAATTIC ACCATCACAA AGTATAATIG TGITTCAAAT ATAATTGAAA
TIGIGIGACT GITGCATATT CICITITITIG TIGITGITAA TGAAAGCATC TIAAACAGIT GCCTITCAAA GCTGITATCI
TIGATANIAA CATACATTAA CCTAACATTG TGGACTICTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTTC CATAAATATG GNYCAATAAA CACTTATTCA TTCTTTATAA
TTAGACTCTA TTGTTAGAAT TGTTTTAGGT TTATAGAAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC
CCACAGAATT TCACAATTTA CCCTGCGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT
GATACATTAT TATTAATTAA AATCCNCAA

<u>SEO ID NO:694:</u> (Length of Sequence = 330 Nucleotides)

GECATAGTCA CITCCAGACA TOGITGCCTC TCCATGIGGA GTAGGTCAAA GTCTCCGTCC TCCCTGGCCA GGTGGAAGCT CCAGAGGGAC ATGITTCAGC TTAGTACAAG GTGGCTGACA CTACTCCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG CCCCACTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGITCTCTGG CATCCACAAG ACTACTGGGC GAACCACACT GCAAAAAATGA AAACTAGCGT ACACAATTTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC TAGAGGTGCAA

SEO ID NO:695: (Length of Sequence = 344 Nucleotides)

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CACTGIGACG GATGAGIGGA TATITCITIG TACCCIGAGC TCITTCATCC TACCTIGGIG GICAAATGIG AGAGCAAGIG CTITIGGGGCT CAGAGGGCAT CACTCCAAGC ATCTIGCATG GAGICTGITG TGGIGAATGI NCITGCTGGC ATCTIGATCA AGGACTITIGT CATCATIAGC CATCAAATGC TIGITGGICC TTCTCAACCC TGTAATGITG ATACTTAAAA AACTGGAAAC ATCCTGACAG AAACAGICGA GAAAGIGGIT GIGIGAGCIC TGGITATCGC ATTACAGITA AAGTTGGCAG ATAGGITCTG TATITCAGIGC CCCATCAAAA ACAG

SEO ID NO:696: (Length of Sequence = 324 Nucleotides)

CTIGAACGIG GCAGATAAGC ATTITGATAT GCIGCIGGAT TCAGITIGCC AGTATITAT TGAGCATITC ACATCGATGI
TCATCAGGGA TATIGGCCIG AAATTITGIT GITGITGITG TATCICIGCI AGGITITGGI ATCAGGATGA TGCIGGCCTC
ATATAATGAC TTAGGGAGGA GICCCICTIT INCIATIGIT TGGAATAGIT TCAGAAGGAA TGITACCAGC TCTTCTTTGT
ACCICTGGTA GAATTIGGCT GIGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCACTG ACCTCAGAGG
AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TEGTGGCCGA AATTTATAAG GCAAGTAATA CTITTAGITT CTITGATAGA CACCATGATC AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAATT TCTCTGAGTC TTCATAAGAA ACACAAGCAA GATTTCACAG AGGCAGTGGA ATTTGAACTG AGTCTTGAGA AATAAAGCAAT ATCTGAACAT GTAGAATGCA AAATAAAGGA TAAGCAAGTG CTAATGCCCA GAGGGGTAAT ACATATTAAA TANCCANTAA CCAATTGCTA CTTGTGTTTC TTACACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCCTGGGT ATAATTTGTC TAGACCCCCA TGTCTCCTTT AGTCTGAGTT
CTGACATAAT TAACTGTCTA TGAGATGTAC TGGGCCTTTC CTCATTGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA
CATTCATTTT TTCATCCTAT TTTTTCTTAC AGCTGCTTAG CACAGTCCTT ATGAAAAAAAT GAAGCCTTGA AAATGGTATA
TCCTCTCGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGIGCTC TAGACTGTGA TECTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA
TGGGCCACTG GGTGGAAGAG GGCCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA
TTCGGTCACG CTTAAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT
TTTGAATTGT AATTAGATTA ACATTGTCAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC
TTTTATCACT TCTAGGGNCT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGITGGA TITICCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TITCTITAGG
ATGAAAGAGT TGITITITGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC
CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT
GGCGCCAGGC TCTTCAGGNT GGGCCTGATC CCNCAGTGGT GCTTACTNTG CTGACTGTGT ACTITATCTTC CCCAA

SEO ID NO:701: (Length of Sequence = 387 Nucleotides)

 TGTAACTICC ACCIACTAGI AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CACGCCTTCC AGGAGCATGG GAGGGGTGTC GTCCTGGNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEO ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG
GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCCA CCAAAACTCA
TGTTTAAATT TAATTGCCAA TGTAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGTCTTTTCCC
ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTTG TCGTTAAGTG GGTCATCCTC CTTTGTCCTG TCTCTTTTAT
ATACACTTCT TTCCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEO ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAAGA GGGAATTCAA TGAGGCCTGA TGGATTTATG GACCAGAACA ACAGAGGGGT CITGAAGGAA
GGAAGATATA GAAAAGGCAA GGTTGTGGTT AGAGAGGAAA TCCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA
GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTTCAAAT AGCATAATGG ATATCTTTGA
CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATTT
ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEO ID NO:704: (Length of Sequence = 422 Nucleotides)

GOCAATGACA TAGAGATGAT AAGAAACAAC ATGGITTGGI AGAGGGAACA TITGATTIAG ACTCIGCCCA TITITAGCIG
TATGACTTAC ATAAGTCATT TIGIGICCAA GCCTCATTIT CTCCCATATG AAAAGTGAAG GGGITGGATT AAATGACTAA
AATCCCCTTC CAGCCCTATG AGCCCCAATGI ATTATGATCT CTGCTTTGTI TCCTTCTTAA GAGGCTTCCT ACTATAAAAT
GTGACCTATT TACATTITAA GITGAAGTAG CCCACAATAA TGAATAATCA NITITAGATTI TCCTCATCTC CTTTGGGAGA
AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GITCATTCAC AGTTTTGATA
TTTTGAGGAC ACCAATAAAA AG

SEO ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC CACTGTCTGC GCTGATCTGG GNCTTTTTCT CCTCTGTCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT TTTTCCAAAG NTTTTGCTT TNNCACTTCC TGGTGCTTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGIN TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTC TGAGTGTGTA
CCCCTTTTAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG
ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA
GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CORNEAGIGI GCCACTGCAC TOCACCITIGG TGACAGAGIG AGACTCOGIC TCCAAAAACA AAAAAAACAA AGITGAACTA
TAAACTGAAT TCCTCCCAAG GITAGITCAG CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGITAGA AGCAAGATGG
NGICAGGCCA GATCTCTTTC ACTGITAACA TTTTCTCAGT TATAATTITT GCAAATGIGG TITCAGTCCC TGCATCCATA

ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAACCAAA AATAAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCGGTT GCATGAGGCA CTITGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT

AAGACCCAGA TCCACGCACT CAGGAACTTG CTCTGAATTT CAGTTGACA ACAGAGAAGT AGAATATTTC TAATTAGCTA

ATATATATAC ACATTTTTTA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG

AGAGANCCCC ACAAAAAAGG TGTT

SEO ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTITIATTA TATACATATC AGTACTCACA ATACGITGCT TATITAAGAT GGCTGITTAT AAGTATAAAG CAGTITGAGC

AACACTGAIT GIGCATTATT GIACITCAGA TGAAAAATCC TIACATGCGG AATCAATGIC TITITAAAATT TCAGATAAAG

AATTITACAT TGAGGEGACA TACAATTGIA AGTGCTCATT TITIGTCAAT TITIAAGACAC CATTATGTGT AAGANGGATT

AATTITACCA TAAAAATTACA AACACCCTCC ATGTCTTGAC ATTCACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA

ATGCATATCA GAGCAAACTC CTAGGGCCTT TAGGTGTGAG GGTGGA

SEO ID NO:711: (Length of Sequence = 216 Mucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTC TATCTTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG

TTATGGCCGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT

GATGGAAGCT TAGACCCTCA TTGCCCAGTG TACCCAAGCC TCTTTGAACC TTGCCT

SEO ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTITUTCC CATAGCACGI ATCACTCTCI CATGIGITAC CIGCIACACI AGAATIATGA CCCCTAAGAG GGAAGAGACT

ATGICAGIAT CATGATTCI NATTAACACC ATTATTTAGA ACCATGCTTG GCTTAAAGIA GIAGCIGCTC AGTAAATATT

TATCTATGIG TGAATTTTIA AGINCITCCI TIATATTGAN TIAAAATTAG TCTCTTGTGT GCAGCAGTCT GGGTTTGTCT

TATGTTGAAA TACTTATGIN GACTTCTACA TACATT

SEO ID NO:714: (Length of Sequence = 349 Nucleotides)

CAGTAATTCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTTGACT
TTNCATAAGT AGTGGAAGGT TTCACTAAGT AAAGATCTGA GTTTCTTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT
TTGCTCAACC AGACAGGAGT TAACTTGTAT TAGAATTGTT TTTNCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC
CTGGTTTAAT GTTGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT
TTCCTGTGAC AAAATCTAAA AATCCAACC

SEO ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTIGAAA AGATCITCAC CAAAGATATA TOGATAGTAA GIAAATATAT GAAAGGITIT CACTGITAAT GATTAAAGGA
AATGCAATCI TGIACATGAA TGITTATAAC AGCATCATIC ATAAGAGCCA AAAGGIAGAA ACAATCCAAA TGITCATCAA
CTGATGAATGA ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA
GGCCCAAATGA CTTACGCCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GHATTITIAG TAGAGACGGG GITICACCGT GITAGCCAGG ATGGICTIGA TCTCCCTACC TOGIGATCCG CCCACCTCGG CCTCCCAAAG TGCTGGGATT ACAGGCGIGA GCACCTGCGC CCCACCCCAT TITGGIGIGA TCTCAGCTCA CTGCAACCTA CCCCTCCCAA GITCAAGIGA TTCTCCTACC TCAGCCINIT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT GATTITCCTA TITINAGTTG ACACTGCATT TCACCAGGNT GGCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTIT TGIATGITGA TITTTTATCA TGCAATTICA CIGAATTIGI TITTCAGITA TAACAGITIT CITATGGAGI CITTGGITTI TNCCAAATAC AAGATCATAT CATCIGCAAT CAAGGATAAT TIGACITCCT CCITTCCAAT TTAGATGICC ATTATTTTTC CICTTGTCTG AITGCTCTAG CIAGGATTTC CAGGATATG TIGAATAACA ATGGTGAAAG TGGGTATCCT TGICATATTC CAGGGTCTTG GAGGAAAGG

SEO ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAA CATAAATAAT ATTAGAAATG GAAAAGITAT AAATCAACTA CAGCAAGGNT TTAAAACTAT TATGAAACAA
ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGAAAAAAG
A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTI TITTITTITTI TITTITTIGA GACAGAATCI CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCICG GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG GGGCTGTCAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCCAGG GCTGACCCCT

SEO ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCATTA AATATAACTA ACTACATTT AAATACGGAT
ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCCTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA
CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT
ATCATTTGTA AACATTGTTT TTTCACATTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCCACA
CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

AAAAGATTIG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG ACATTAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT GGAAAAGAGT TGGCTGTTTC TTCAAAAGTT AAACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEO ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATICATE AAATAATCCA TETAACATCA CITAGCACTE AGAGITAACA AAGGCAAATE TTACCIGAAT AGGAGGAAAC

AGAGGAAGAA CAACGAGGIC TCTITITATCI ATGCTAAGCT TIGICTGAAT AGGAGAGAA TGTGTGGCCT GTTGGTGAAT

TTATTGCTIT GTGGTAGTAA TGGATTTYCC TAAAGCTGTT TCCCTCTGAT CATTAATAAT CCCTGTACAG CAAAGGACTA

TTGTCCTTTG GTATGAGTAA ATAACCCTGT TGGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA

TATAATGCAG GTGCCAACAC CCAAAGGGCA TGACCAGGGG TTCCCCTTCC

SEO ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAACT GAAGIGIGGA AGAAATGAAA GGGCGAAGGT GIGITITGAG AAGGCCCCG AAGAAAAAGCC CAACAACCCA
GAATICICCI CIGGACIGGC AATIGCGATG TACCAICIGG ATAATCACCC AGAGAACAG TICTCIACIG ATGITITGAA
GCAGGCCATT GAGCIGAGTC CIGATAACCA ATACGICAAG GITCICITGG GCCIGAAACT GCAGAAGATG AATAAAGAAG
CIGAAGGAGA GCAGITIGIT GAAGAAGCCI TIGGAAAAGIC TICTACCGG TIGTGGGAAT CCACACCAAA CCAATGGCTA
CCICIATCAC CAGAITGGGG TIGTGCTACA AGGCAAAAGT AAGGCCAAAT GCAGANTACA GGGGGATCIG AAGCTAGT

SEO ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACITAGT TITGIGAAAG ACTCACAGTA TCACITGGIT TCIGGACACG GITCGAGACC

TGGCTGTGGC TTGCTGTGGC CITGAGAGCC ATCCCACAGC AGCAATGCTG TTGGACCCTT TGGCTGGACAC CTTCAGGACC

CCCTGCAACA GCACTGTGIN CCTAACCTGC TGGCATGATG CCCCTTINIT GACAGGGCTG CATACAAGGC CAGCGACAAG

TGGCAGGCAG TGACGCCAGC CTGGATTTGC TGAGGGCACA CGCCATGCTT CCTGCAGTGC CAGTGCTCTT CINGGTCCAC

TTTGCAGCAA GGATAGATGT GGTTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGIAGAGI AAATCCIATT ATATCGAGAT ATTGGICAGG CAAGAATTIT NCITTTAAAA TAATTTATIG TAAATGAACC
ATAAAATTIT NACCTITGIG CCATCITCIA GGCIATAAAA TAGICITATA AAGAATCAGA TIGITAAGAG TATATGAAAT
GTGGATATGG ATGIGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCITTCT GATGGGIACA AAAAATAGAA
TGAAGAAGAT CTAGTATTIG AGAGCACAAC AGGGIGACTA TAGTCAACAA TAATTTATTG TGCATTITCA CATAACTAAA
AAGIATAATT GGGATTGTAA CAGAAAGGAT AACTGCITTG AGGTGATGGG ATACCCCATT TTACCCC

CCITTAAAGC AGCGGATCCC CIGGICCCCA CCCCCAACIT TATATICAIT AGGCCIGAGG IGGGGCCIGG GAATCIGGAT
TIATAAATIG CICCCCTAIG ATICCAATGC CAGIGGGITT TAGACCACAT TITGAGAAAC AGIGCIGIAA ACIGITITCC
ATITGCAGIG AAGGAAAATG TAGGGITTGI GICGIGAAAC TATGCAGAGA AATIGAATAG TATTINAGIC TAATCITGCI
TITTAAATAAC ACGGAAATIT TGAAAGICCG CITTAGGGAG TICCAGAACC TGICCATGAA CAGCAACAAG AAAGATCCCN
GIGIGAAAAT GAACACIGGI TGGIAAAA

SEO ID NO:728: (Length of Sequence = 305 Nucleotides)

TGITTIATTA TAATCTTATA CAGTCTACAT AAATTIGAAC TIGIATTIAT TIGGGTICAG TIATAACATA GCATAATAAA AATCAAAGCA CIGGCCCCCT GAAATAAAGC AGGCAATCAC CATTCAATAA ACACACITGA TITAITTIGI ATAAAAAGGT TAAGTTACA ACTAAACTIT TATAAAAANGT TIAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC TCIGCCACTA TACAAGAAAA CICTAATTAA AGAGTTCACA AGGTTCACT CAAATAGATA TATTT

SEO ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTI ATTITICIAT TITICCATGAA GAAGGAGAGG GACAATTITA GATICACCAG TGTGCAGGAC AAATTCITAC
TTAACCTATA GAGGAGCAAA CITICITCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTICTCG
ATGTACCATG ACTACAAATT GICACAGTAG ATTITGGATG ACTITACCAT AGCCACACTT AATGAATTAT TATITATATT
NCTATTIGTA CITITAATAAA ACTATATTIT AAACTTTAAA ATTGTCATTT AAATTACTAA AGAAAATGAG TAGTICCCAT
AATGAATCCA TAATGTTANG AATTTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEO ID NO:730: (Length of Sequence = 311 Nucleotides)

CICITITATI CCITIAACIG CITAACAAA GAAAGAGICI CCAAAGIITA AAAAACCIII GAAAAATATA CAGCIIGATA
TTATITACAI AAAATAIGAN TOCAGGIICC AATAICAAAC AAACAIIGCI AIGICAGAAA CACAGIGGAA GGCAGGAACG
TAACICACIG CCITITAGAI GCAAAGACIA AIAGACACGI TCICCNATCI CGACIATCII NGITACCIGI TATCCICANA
ACATAAATTA TTANGGCACC TGNGAGGIIG GAIGACIACC GAAAATGGNC TICATACCII CIGIATGAII A

SEO D NO:731: (Length of Sequence = 349 Nucleotides)

ACCEPANTE ACAGANTET ACTAMANTAN CAGCAMANTA AGAGAGCATG ANTIACATAT CAMATTATET AMAGCAMATA
ATTIALCAMA TITCIGGAMC AGACAGAMAG CAGATGAGTC TACCAMGAMG GATAMIAMAC AMIGACACCA GAGAMAMACC
ACAMCIGAM AACITAMGAM AMCIGCCIMA GAGGIGIGAG CCAGAGCICC CAGGAGCCCI ACAGIGCICC AMAGCICAGAM
CIGGCAMGIA TCAMAGICAM GAMIGCIAGA GAGGIGAGCIAG GCCICITGAC TITCICITCI CICCCATIC ATAGACAMGA
AMGCALATCI ACCITTAGGI GGCCIAGAM

SEO D NO:732: (Length of Sequence = 370 Nucleotides)

AAATTETGIC CICTAGCCTA GAAGCAATCA AACTCCAACT GGTGCTGCTG ACTGANCTAC GCATGGATAC GCCATTCITC
TGAGGCCCCT TAGACCAACC CCAGGAGGAG CCCTGACTTC TGITCCCCAT TINATGCCCC TTITCAAGCA GGAAGTAGCC
AGAAACAGTC ATTGCCCAAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA
AGAAACTATC TTAGGCAGAT AGAGAGCAAA AGGGGTCCTT GGGAAATTTT TGITTCTTTT AAAGTAGCTG CAGAAATGTT
TCTTGCCTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEO D NO:733: (Length of Sequence = 357 Nucleotides)

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THITTIGGIG TGTAGAGACA AGGICTIGCT ATGITACTAA GGCTAGAGAT CCTTTTAAAA TGTCTTTCTG CTAGGITGTT GGGCCATCAC CTCTCCTTTG TTTCCTTCTC CTCTCCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGITTGC

TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTC ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG CCTCGGTTTC CTCTCTMGCA AAACAGAGAT ACTAATG

SEO ID NO:734: (Length of Sequence = 374 Nucleotides)

TEGRICAAAGA AGAGAAGGAA ACCITEGTCT GCATEGCACT TEGTACITTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC
CTGCCCTGCT CTGTGTGCAT CCCTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCCCTGGATC
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCCTCA GGACTCAGGA GCAACCCAAG GATGTCCCAG
GGTCACAGGA AGACTTGTTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEO ID NO:735: (Length of Sequence = 348 Nucleotides)

SEO ID NO:736: (Length of Sequence = Nucleotides)

ACACTCCTGA CCTCAGGCAA TCCTCCCACC TCAGCCTCCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GCGCCCAGCC
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTTG GAAAAAATGT TTGAATCTTA TTTTAAAAAT
AATTAACGAT TCAATAGGC ATGTTGAACC TTTTTTCGGC TACTGTTTTC AGCAATTGCA GTTGAATGAG TACAAAAATGC
ACCACAGAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTNCATG TATTGTTACA
ACCAGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

367

SEO ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAACTTCATT TTATACAACE AGTGCATACA CCACTGGGGG AGINTCTGAC TGATGCGTGG GAGGGCGGGC
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GGCGGGGAAG CCCTGGGTGC TTCCTCTCCT CGACTGACCG CTGTGTGTC
GTCCCCAGAG GAAGAGCGGN NGGCAGTCAG CCCCGGGGGG GATGGCACAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC
AAG

SEO ID NO:738: (Length of Sequence = 358 Nucleotides)

CEAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTCAGAATG
GCTCTGTACC CAACCGGCAG ACCCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT
CAGGGCAGGG CCCAGCACAC TNCCCGGCCA GTCCTCCTAC CTCCCGAGTN TGCGGGCAGC TNCTGTCCCA GCATCTGCTG
GTCATTTCGC CCTGACAGTC CCAACCAGAA CCCCTNGGGA CTTGAATCCA GAGANGTCCT CCAGGNAACC CCTCAACGAA
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

SEO ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCCGAGGC AGGCGGATCA CGAGGTCAGG AGATGGTCTA GACCATCCTG GCTAACACAG TGAAACCCTG TCTCTACTAA AAATACAAAA AATTAGCTGG GCGTGGTGGC GCGTTAGTAT TTCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC
AGTTTTTGTT TATGATTTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA
TACCTGTTAT TCCCTTCAAC ATCTGCATTT TTTCAAGNIT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEO ID NO:740: (Length of Sequence = 374 Nucleotides)

ATOGICAGAT TOACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGICAGGTTA COCACAAAGG
GAAGCCCATC AGACTAACAG CAGCICTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC
TTAAAGAAAA GANTTTCAA COCAGANTTT CATATTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACINCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAAACATGG
AAAGGGNATA ACTGGTACCA GNCACTGCAA AAACATACCA AAATTGTAAA GGGA

SEO ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTICA TAATAATGIA ATAAACATTC ATGAACATAC CCIATCAAGC AAGAGCIAGA ACCITIGGCAA TCATTICCIT GACTOCICCA GITIGIGGCI ATCATGATAT TCAGCCCCAA GITCATCATT TCIGITITIN CITCIATACA GGITICITAT ATGIATTICT AAAAATCATT GGITATTICA TCITIGIAAA AAGICATIGI NCIATTITICC CCACIAGITC TACATTGCAT TCATATTGIT GIGGGITGIG GIAATTCATT NATITTGACT GCIGIATAAT

SEO ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTIT AGGAATTINI TICIATAGAG TICITCATTA ACATTIATAC GAGTITTITIG CIGAGICAGA
TGGACAGTIG GGTICIGATG CITTINCCTT COCGCCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANIC TATGAGCGIN
TCCGGGGCCGG NGGATCTGGG CAGCATCCAT GGTGCCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTGNTCCAC
GAAANACCGN CTTTCCGCTC TGCTTCCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TIGCITICA GITATCIGGA ACTOCICGIG CICTITCAGG AGCICCIGGG TGIGCIGIAT ACTGGAGCCC GIGGAGGIGT GIGGGAAAG GIAGAACTOG CCATTGICAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CACGTACTGC TGACACTGGT CCAGCCGTCT CITCCTCATG GICCAGTAAT GCAATACCCT GITCTCCCGT TGGAAGAGIT CATTCAAGAT ATTTTTCACT TGCTGTTCAG GAGCTTTGAT GIGCGTCACC ATTCCTGGCA TGITCACGCT TGITCCTGTG CAGGTATTTC AGGAAGACGT CTGCATTACT CCGAGCAAGAC GGTCAAGAC CTTCAGGAATG CCTCCTTINC TNCAGGGTGC GGTTTTCA

SEO ID NO:744: (Length of Sequence = 359 Nucleotides)

TECERCAGAG TETTECACTE TEACCTEGGE TEGAGTECAG TEGTECAATC TEAGCTEACT GCAACCTETE CETTECGGGT
TEAAGCCATT CTCCTGCCTC AGCCTCCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTTTGTAT
TETTTTTTTT AGTAGAGATG GGGTTTCACT ATGTTGGCCA GGCTGGTCTC AAACTCCTGA CCTCGTGATC TETGAGAGGGG
GGCCCCCCCAA AGTTCTGGGA GTACAGGGGT GAACCACCQN GNCCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAAGAGG
GATTCTNCAG CTACACCACA CCCTTAACTT NGAAGGACC

SEO ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTITTAT TITTAAAAAA CGIAACAGAC CACTCTAAGA AACTITGGCA TICAAAGCAG TAGITACIGT TATTIGCTAA CICCIGACAAA AAAATTITNC CCCICACAAA CAACCGGCAA ACTCCIGCCA CITCCTAGCI TGGIGGCIGC

CAGCETGCAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCCAACC CACGGAGAAA NTGCAGATGG TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNTCCTCCNT CCCCTNCACC AGCTCCACTT TTNCTGCTGA AGAACAGAG ATGTGGAGGC AGGCGTGACC T

SEO ID NO:746: (Length of Sequence = 285 Nucleotides)

GIGITITIAT TIATACCTAC AAAAAGAAAA CAAGATGAIG GIATCAAAAG GACAATITAC AAACTAAGAA TAGIAACATA
GCITTCAGCA TCCIGIGCCI GAACATCACA CATCIACAAG TCITTCAAGA CITAATGCAA CAGGAATNIG TCTGGAGACC
AGCAAGANCA TCAATAGAGA GCACIGNICC CAAGCAAAAG CCACIAACCI TITAGATGAG AAGICCACAC AACGGATINI
TAGGGGAGGA TITGGGRAAA GCAGCCCATI TGCTTAATAC ATTGG

SEO ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGIT TIAGAGIGCT CAITCITICA ACTIATITGA CAAATATITA CIGAATGICT GCCATAAGGC AGIAAAGGCA CAGAATGACT CAAAGCCITT TINCCCITAT GGGGIGIAAT INCIAGIGGT GGAGACAGAC AATGAGCAAG TAAACAATCA ATCGGCTAAT GATAACTACT GIGAAGAAAA TAAAGCAGCN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGITAGGGA AAGCTTCITT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEO ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAAGAA
GAATGCTCAG TACGTTTGIN ATCTATCAGA AAGAAGAATC TGGAGGTCCT GACGTGTAAA CAGAGTTGIG GGTACCATCT
CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG
AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAAT TTTTAACTGA AGTTCCAGGA
GCATACAAAA AGCCAGGNAA TTTACC

SEO ID NO: 749: (Length of Sequence = 325 Nucleotides)

CTAAACTTA TITICAAAAG CITAAGGCCC AAATACAAAC TGAGGICITC CTICCIAACA AATTAATACT AAAATGAAAC AGCITTINIT GIGICCITAA GACAAAATAA GGAAGGAAAA CGIAGCIGCA GITGICCACG AIGGATATIG GITCITIAAA ATATATCIGA AAGTAGTAGT CAGAATGANI TATGGITGGA AAACTGAGGN ATCITCIGGI TGCAGGIGCA AAGIGACIIT NITTATICIT GICICAGICI CCITGATAGC CACTICACTC TGCTACTACT CAACTITCIC CTAAAAATAC TICATCTATI

SEO ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTINA GTAGAGAAGG GGTTTCGCCA AGITGGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCCTGCCT
CGGCCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TINAGGAATT
CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTTCCGTA CCCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA
GCTCTCCCAG CTGCCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNACG TCACTGCTTT
CTAACATTGC TCATTTGTTT G

SEO ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTING CTCTGTCACC CAGGCTGGAG TGCAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT
TCTCCTGCCT CAGCTTCCCA AGTAGCTGGG ACCACAGATG CCCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTGTTTT
TAGTAGAGAT GGGGTTCAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT

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TTATCTTGTA AAATAATTTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCCTT
TCTTGCCAAG ACTTTCAAAG CCAAAAACTT CANCAGTTTT CCTAGATGAC TAGACAG

SEO ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCCTGGGCC AGCTGTCCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGCGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCCTGCAGTC
TTTNGTGCTG GTGTCCCGCT TCCCCTTTNT CCGGCTGTTC CAAGCCGCTGC TAAGCCTCAT CGNCCCCNAG TACTTTNACA
ANCTGGCGCCC CTGNCTGGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGGNCTCAT NATCCCAGCT TTGGCCCCTG
GTTGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCCT

SEO ID NO:753: (Length of Sequence = Nucleotides)

AGCITCAACI TEGAAAGAAG GATGATGCAG TITTGGGCCC TCCGGCCATC AATNACCGAC AGCNCITTGA CCTTGCGGGA AGCCAGGIAT ATGINITCAG TGGAGCCCAG CTCTTCTGG TGCCTCTGGI AGGCTGAAAA CATCTITTCA AAATCCTCTA GGTCCAGGNI CCGAAATACC TGCATGTCAT CAATCTCATI CCATACGGIG CCAGGGACAC GCTCCTCATT CAGCTTCACC CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTTCCT GAGTGGGACG

SEO ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAACTAG CTCTGTAGGG GTGAGGAGGA CTGTNCTGTG TATCATCCTT
GATTGTNTTC CTTCAAGGAG CATTGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTTGTC
AATGTTCCAC ATAATGCAAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGCT GATATCTTGG AAAACCATAA
CTGCCTCTTA ATTTAACATA GAGTAATACA TAGINCTGTA TTTTTTTTAA AGTGAGCTNT AATGGGAAAG TATTTTTNAT
ATGCTTTAGC TATAGCTAAA GG

SEO ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGITTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCCTCT CTTGGGGAAG GAGGGGGAG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CNCCCCCAGC AGCGAGGGGC TGGAACTGCT GATCATTCGG AAGGAAGGGT TCGTTCTTGT CCACTTCCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG GGTCACTCCC CTTGGGGGG GCACCTCCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TEGCATEGIT GCATGINCCT GIAATCICAG CITACITEGAG GCTGAGGCAG GAGAATTGCT TGAACCIGGG AGGIGGAGIT
TEGCAGIGAGC CAAGATCGCA CCACTGCACT CITAGCCIGGG TGACCGAGCA AGAITCATIT TCAAAATAAA TAAATAAATA
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCIACAAT ATTTIAGCAG AAGIAAATAT GGITTAATTC
AATGGAAACA GCTCIGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC ACACTCIACA TITAAACCTCT GAGCACTAGA
NGCTTACCTA CITATTCATA GGGCTCACAT ACTGIAAGGG GGGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTICCACTGC CAGGITATCG TCCCGGGAAG CCCCCACCC CCTCGNITTC CTCCTCCGCT TTCCCTAACC CGTCTCGCGG
GGGCATCTAC GNCTCGTCCT CGNCCTCCTC CTNCTCGAAC TCCCCTTGTT CGTCGGCCGT GGCGTCCTGG TACTGCTGGT
ACTCGGACAC CAGGTCGTTC ATGITGCTCT CGGCCTCGGT GAACTCCATC TCGTCCATGC CCTCNNCCGT NIACCAGTGC
AGGAAGGCCT TTCGNCGGAA CATGGCCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC
CGATGAAGGT GGCCGACAT

SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TITITITIGIA TITCITITGI ATATGGGIIA AATGITICCG TIATATITCC TAATTGGCIA TIGCICGIAT AAATAGATGI
GGITTIAGGC ACATATITIA TATCIGGCIC CIATACTAAA AATCITITAT CATTICCAAC AGITTICAGI TATGCICITG
GGITTGAAGG TAGACAATAA TGICATCTAC ACATAATGAT ACINCIGITI TCNCITITIA AATGCITATA GCICITINAT
TITITATIGCT TIGCITGIGC TATAAATNCI AGAATGAAGI TAAATAATCA TAGCAGATAT CCITTITCCT GATTTAATTA
TAATGCICCT GAAATITTAT TAAGTATGAT GACTGT

SEO ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGIGGG GGCGGGAGGG CGGTGGGGTC GGGCGGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC CCNCAAATTT GTCAACATGT CTTAAATAGG TGCATTATTT AAATCTTATG TACAACAAGA ATCACTTTGC ATAGCAATGG TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GGCGGGGGC GAGTTCGCAG CTCAGCTCGG AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCCCGCAATN GTGGCATCGG AGTTGACTTT TCCCACACGA CGGCATCAAN CACAAAGGCA AAG

SEO ID NO:760: (Length of Sequence = 311 Nucleotides)

SEO ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTAAG AGACAGGGTC TCACTCTCTT TCCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG CATCCTCGAA CTCCTGGCCC CAAGGGATCC TCCCACTTTG GCCTCCCAAA GCACTGAGAT TGCAGGCGTG AGACACCTCA CCTGGCTTGT CTGAGAACAT CTTTTAAAAA AAATCCCTTC TCTTGGGTTT TCTGTTACCC ATATGTCTAC TCAATTTGGT TGTCTCAGCT TTGTTGTTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEO ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGTAT ATAAAAGTTG AAATTAAAAG ACACATATCA TGAAAATACT AACAAAAGC TATAATAGCT ATATTAATAT
CAGGTAAAAT AGACTITAGG ACAAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTTGA GTTAATCAAA
AAGATATAAT AGTTTTAAAC ATTATGCATA TAATTAANIT CCTCAAAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG
AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCACT TGTTGATAGG TCAAATGGA

SEO ID NO:763: (Length of Sequence = 369 Nucleotides)

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

COGGIAGCAG TTGCTGAGTG TCAGCTAGAC AGCAGCGACT AGGGCTCGGG CGCCGGCGAG ATGCCTTINT TCACCGCCAA CCCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

ACAAAGITGG AAGIACTOCT AATGGAGGGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCCACAT GITGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACINTGG AAAGATATTT CATTTAGAAG TATGTTCCCG TGGATTTINC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TIGICICCIT GATGCAGGAG CIGAGGAGCI GCACAGAAGG TIAAAAGAGC TGIAACACAA ACAGGGCIGC AACATGCCCC
TIGCCCCCCA CAGGGAGAGA AGAGCICIGG CCCICGGAGA AGCCCAGACC TGGGAGCTCC TIGAGCCCCGG GCTGTGACTC
CCICTITGGG GCCCIGGITG GCGICACIGC AITCGCCAGG GCACTGITG GAAGCTGCIT GINATGCGCC TGGTCCAGGG
GGAAGCTGIT TGITGIGIGC CIGGICCAGC CACCTCATGG AGAGCCTGTG CIGGCACCTG GGAGCTGCCC AACCTGGGCA
GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTTTA TTGGCCTGGG ACACACAGGG GATACCCTCA COCACGATGG GGTGGGGGGG GTGGTGTTGA
AGATATAATC TNATGGTCAC TTGTGGTAGA ATCGCGGGTT CTGGCTGTNT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG
CTGGTAGCTG CAAACCCGAC TTTCCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGAAG CAAGGAGTCC AGGGGCTGGA
TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTTAGCA TGINCCATCT GCTTTINCAA GGNCAGGGCA CCACCAGGCT
T

SEO ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCECCCCIC TAGTICACIA TICTIGICCCC GGTACCCAGG GCATCATAGA CACTCAACAA CCATTCGTTG AATATGCAAT
TGGATGAAAT GAATAAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTTATGGG
AGAAAATTAG GGGAATGAAA TCCATAGAAA GGGTTTGCCT AAGINAGAGT GATGACTNGA GCCAGAAGAC ACCCGGGGGA
GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGIN CAGCCTCGAG GCT

SEO ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTTCTCT GCCTGTTTAT ATTCTGCACG TCCTTAGTAA CCCCTGTGGC CCACTTCTTA CTTAGGTCTC TCCTAACATG
TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCINCT TATACTTTIN CAGTAATTTA AATTTTATCA TTCTACTGCT
TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTTGGAAGT TATCTGCTGC
CTTGGTACCC CCCCGCCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GTNGTAAAAC ACAGATGCAA
TCTTTCCACC ATCCTCTAGG AATTCTTCTG TGGGCTTTCC ATTGGGTTAC CC

SEQ_ID_NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGGGG ACGTGACCGC CGAGGAGGCA GCAGGCGCTT CCCCCGGGAA GGCCAACGGC ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCG CCCCCTGTGA ACGGAACAGA TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCCTAGCC AGGGTGCTGA GGCCAAGGGG GAGGTCCCCC CCAAGGAGAC CCCCAAGAAG AAGAAGAAAT TNINTTTCAA GAAGCCTTTC AAATTGAGCG GCCTGTCCTT CAAGAGAAAT C

SEO ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGIGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT
TCATGTTCAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCTGGCCA ATTTCTCCAG GCTTATCGTC
TCCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTTG TTCTTGGCAG CCTGTCTATA TATTTNATTT

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ACCICICITG TTATCCCCAC TITTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCCTA
GACTTCTATC TCTACCTCTC ATCTGACTTG GGCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCICACTG CAACCICCAC CICACAGGIT CAAGIGATIC CITGCCTCAN CITCCCAAGI AGCIGGGACT ACCGGIGCAC
ACCACCATGI CCAGCIAAIT TITGIATITI TNATTAGAGA CAGGGITICA CIATATGITG GCCAGGCIGG TCICAAACTC
CTGACCICAA GIGATCCGCC CACCICGGCG TCCCAAAAIG CIGGGATTAC AGGIGIGAGC CACCATGCCC GGCCTAAAIT
ATAGCIATIT TAGAATGITG AAAGIAGIAT TATGIGATIT CAGITIGCCA TAAAITITIC ATAIGGITAC TAAITATITC
INTITITGIG GATATATCIT CIGGAAAICT ATIGAGG

SEO ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT
ACAAACTTTG CAAGCACACA OGCATGTNTG TNCCAAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATTCTACA CAGCAATGAA
AAGGAGCTAG AGCTACATGC AACAACATGG ATACAACTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCCA

SEO ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCIACGG CAGAAAAAGA AACATCITCC TATAAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTTGC GATGTGTGCG
TTCAACCCAC AGAGTAAAAC TTINCTITTG ATAGAGCAGI TITGAAACAC TCTTTTTGTA GTATTTNCAT GTGTATATTT
AGAGCGCCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTTCTGT AGAATCTGCA
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEO ID NO:774: (Length of Sequence = 387 Nucleotides)

GITTOGCTCT TGTTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCCTCCCAG GTTCAAGCAA
TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTTGAACTCC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC
TGGGATTACA GGCATAAGCC ACTGCGCCCCA GCCAGAAGAT GCATGATTTC TTAGGATCAT ATGCTGTTTG TAGCCATAAG
GTAAATCATG TCTCTTCCAA TCATGACTTT TGGGAACTCC CTGAATAATA AAAATGAGAG TTGAGAT

SEO ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINICI TICTGCATCE TICTGTCATA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCGTAAGC
TCACTGTTCA ACCCAGCCCA GCAAACTGGT CAGITATAAA TITTNCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT
GAGGTTTCCC TCCCATCTTG TITTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTCATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA
GCTTAAAAATT GACTGCTGTA GGNTCCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCAAA GCTTATAGCT CANCCAGCTG

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

AACACTGGGT AAGCACTITE TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTC TTGGTCTCAC
TGACTTCAAG AATGAAGCCG TGGACCCTCG CAGTGAGTGT NACAGCTCTT AAGGTGGGCC GTCTGGAGTC TGTCCCTTCT
NATGITCAGA TGTGTTCANA GTTTCINCCT TCTGGTGGGT TCGTGGGTCT CGCTGGGTCA GGNGTGAAGC TGCAGACCTT
TNCGGTGAGT GINACAGCTC TTAAGGCNGC GCGTCTGGAG TTGTTCGTNC CTCCCGGTGG GCTCGTGGTC TCGCTGGGCT
CAGGAGTGAA GCTGCAGATC TTCGC

SEO ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCCAAGCCCA NIAATGCTAT GGCTGTTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC TGGGGAGAATT CCCTGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCCTTA CTTCCCCCCA AACAAATNAG TCTCTCTCTC TCTCTGTCCT GAGCTGCCTA GAGCTGAGGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEO ID NO:778: (Length of Sequence = 361 Nucleotides)

SEO ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCAAACACAC ACTTAAGAAT GACTTACTCC TCTGGCGGAC CCCACCATTC CCTCACCCCG CTTTGGCTCT GTCCTCTCGT GGAGCTGCCC CTGCCCCTAA ACACTGCCTC CTCTCTACCA ACCCGGACCA TATTTCCCCT CCTCCCCTCA CCAGGTCCAG CAGTACCCAC CACGTTTGTG GACATCTCCC CAAGGAGCTC TCACGTATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACCT CTTGTGCTTA GGTCTACAGT GAGTNTCCAG TGATGCTTCC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEO ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGCGGANT
GCCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTTAAACA CTTGAGTTAA
ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGCCAGATC ACGAGGTCAG
GAGATCAAGA CCATCCTTGC CAATATGGTG AAAACCCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA
CGCCTGTGGG TCCCAGCTAC TTGGGAGGCT GAGGCGGGAG AATCGCTTGA GNCTGGGGAA GTGGAGGTTG CAGTNAGGGT
GAGATCGCGC CACTGCACIN CAGCCTGGGN TGAGAGAGACA AGACTTCCGT TTC

SEO ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTOG GGAGGCTGAG GTGGGAGAAT OGCTTGAACC TGGGAGACGG AGGTTGCAGA GAGCCGAGAT TGCGCCATCA CACTCCAGCC TGGGCGACAG AGTGAAACTC CATCTCAAAA AAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG NTCCCATTAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTTCCCTTT TAAGGGCCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACCTCAG TGGAAA

SEO ID NO:782: (Length of Sequence = 443 Nucleotides)

GICIOGGGCI CCIGACCICA GGIGATCIGC CIGCCICGGC CICCCAAAGI GCIGGGACIA CAGGCATGAG CCACIGCACC IGGCCIAATI CIACATITIN ATCIACAGCA GACCITITAT CATAAAAGAG TITICIATAAA ACATITICICA AAAGAAAATA

TGIATTGACA TTCIATTITC TITCTCCICC AGATACTAIT TITMGGAITT NAAACATACA CAATACTIAG GAGACTIGIT
TTACTCAGAG TGGAAAATIT INCCAGGGAC AAAGTCAACA CAAMGAAACA AACAACAAAA AATAGCCAGA AAGAGAACAG
TTAAGIGCAG CICGGIGAGI CCCGGCGGIT CCTCCCGGC ACTGGCTCGI CCCIGGGGIT CICAAGGITC CATGCGGCCA
CAGCGTCCGI CCACCTGITC CACGAGAGC ACATGCTGGA ATT

SEO ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAGGCC GGCACAGTG ACTCATGCTT GTAATCCCAG CATGNTTGNA GACATAGCAG TAGGGACTAT CGACAAAGAA
ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC
TGGGTAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC
TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTACTCTCAA
GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEO ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTIGCA AATTACACAT GIGAAAAGCA GITAATATCA AAAATATATA AGANACTCAA
AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TIINCAAAGA AAGACATACA
TATAGCTIGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA
AACTCACTCC TGTTAAANIG TITAA

SEO ID NO:785: (Length of Sequence = 363 Nucleotides)

GIAAAGNITG AGAAATOGGA TEGTIGOTGI GICTGIGTAG AAAGAAGTAG ACATGGGAGA CITTICATTI TGINCIGTAC
TAAGAAAAAT TCITCIGCCT TGGGATCCIG TIGATCIATG ACCITACCCC CAATCCIGIG CICTCIGAAA CATGIGCTGI
GICCACTCAG GGITAAATGG AAAAAAAAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTT TTTAAAGACA
GAGICTIGCT CTGICACCCA GGCIGAAGTG CAGIGGIGAG ATCITGGCTC ACTGCAACCT CCACCTCCCA AGCICAAGTG
AATTCICCAT GCCICAGNCT TTCAGAGINA CIGGGGATTA NAA

SEO ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TECTTTTAAG GATTTAACTG ATAGTAAAGA TAAATGTGAG TNITAAGAAT GGGATTTTTA
GACTAGGCTG ACACAAGGGA TCTTCTTINA ATAAGGNTCI TGAGCATTTG TNITTTTGGA GCTCATCCTT AAGGGCTGGA
CAGGAAGAAT CCTGTGTTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG
AGAAATGCAT GAGTGATTTA ACGCACGGNT GGGTGTAGTC ATTATGTTCC T

<u>SEQ ID NO:787:</u> (Length of Sequence = 256 Nucleotides)

TATTICIGIA TAATTIINAT TAIGACCATA AAAATAACAA TGIAGICAAT AACAATITAA TIGIACATIT TAAAATAATT AAAGIATATA ATTACACTGN TIGIAATAAA AAGIATAAAT GITAGAGGIG ATGGATACCI TATTIACCCI AATGIAATTA CITACACATIG TAGGCCIGAA TGAAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT AATAAATTIC AATAAG

SEO ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGITTTCAGC TCAAAGCAGA CGGCAAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC
ATTACAGACA AAAAAAAAAA AAAAAACAGA GTGAAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA
AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTTGTCCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

CIGINATATT TGTAATGGTT TACTATGAAG GCTGTTCCAT AACCINCAAT ATCCACTGNT CTTGGGTGGT ATACCAAGGA
TA

SEO ID NO: 789: (Length of Sequence = 357 Nucleotides)

TCAATGIGGC ATTIGITITI NITAGAAAAC CCCTTAGTAA GCACTTCTCI AACCCAGAAT AGACACTGGG TATCCTCCAA GAGTCCCATA GCTTTCATTT CATCTTCCAC CCTCTTCTGA GAGGGGGAGG CAGGGGATAG GGGTGGTGTC AGGCAGTCTC CAAAATGCCC CTCCTAGACC CCTCAAGGGAA TTCATGTTGC CAGCAATAAA CCCAACAGCAC CTCAGTGGGG CATCANAGGG CCCTCTAGGC TCAAGGCTAT TGCCCAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGRAG GCTCTCGCCAA GACTTCCTAG GGGCTTGGTC CTTCAACTTA TGGGCCT

SEO ID NO:790: (Length of Sequence = 366 Nucleotides)

TEGCCAGECT GETCTTEAAC TCCTGACCTC ATGATACACC CECCTTEGCC TCCCAAAGTG CTGCGAATAC AGGCGTGAGC
ACTGCACCCA GCCTTGTGTG ATCTTTAAA GTACAGTTCC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTTG
CTTTTATATG GCAGTTTACT CAAGCTTTTT AAAGAAAGAG CATTCATCTT GCTTTTACGT GGTTTTAGAA TGTTGAAAAC
CTTTTGNTAA ATCTGAGTAA TTTACTGCAT TINCCATTAA TTCAGCTTAG TTAGACTGCT GGNTCCAGTG CTTTGTTTTG
CTGTCACATA TACCCTAATA TGCTTTTTAA CATATGNCCA AATTCC

SEO ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA
GCCTAGCAAA TCTCCTGGAA GTCTGCGCTA TAGTTACAAA GATAGTTTCG GGTCAGCOGT GCCACGAAAT GTCAGTGGCT
TTCCTCAGTA TCCTACAGGG CAAGAAAAGG GAGATTTCAC TGGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA
AGCCTCCTGC AGGAAGTGCT TCAGGGNTAC CACCACCACC CTNACAAGGN GATATTCTAG GGGGTACTCA AGAGCAT

SEO ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGIGAAAAGA TCCTAAACIT TTCAAACATG TCACAGGIAG TACTIGAAGI ATGCTTGGIA
AAATGIACCG GITAAAGCAG TATGITTCIC AGATAGCCTG AGATTITATT TAACAATTAT GIATCIAAGI CTACIAATAC
ATTTGAGCAA AAGAGIGITG GGINCATAAA TAAGANGICA GIATTTCACT TAGATTATIT CAGAAACTIG TAAGINCCTG
TAAATAGCTA CTCTGAAA

SEO ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCATTCIN ACTTAAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT
CCCTTCCCCC CCACCAATAC TCCTTTCCCC AAACACCGTC CCCACCCGAC TCTATGTTA ATTGAATTTT TATTTGTGAT
ATTAGAAAA CCTAACCCAT GGCTGINATG CTGAGTGTCA TTTGGCTTCA AGCTCGAACC AGGGNACAGC TTGGCCTGGA
ACCCTGAGAC AAGATGCTGG CCTCANAAGG TGGGGGCTCA CG

<u>SEO ID NO:794:</u> (Length of Sequence = 330 Nucleotides)

GITGAGGCTG CAGGGAGCCA TGITCACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTOGG CGTGAACCCA
GGGGGCGGAG
GTGCAGTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA
AAAAGTTTAC TACTCGGCTT TAATTATTTC GTTTCGGTTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTTAGTTGT
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA
GTGGATCTAA

SEO ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACTATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
CAAAGICAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA
TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTTNCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC
AGAAGCAGAA AT

SEO ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGA CAGCCIGANC TCCCIGCTCA TAGIAGIGGC CAAATAATIT GGIGGACTGI GCCAACGCTA CTCCIGGGIT
TAATACCCAT CTCTAGGCIT AAAGATGAGA GAACCIGGGA CIGITGAGCA TGITTAATAC TITCCTIGAT TITITINCTIC
CTGITTATGI GGGAAGITGA TTTAAATGAC TGAIAATGIG TATGAAAGCA CIGIAAAACA TAAGAGAAAA ACCAATTAGI
GTATTGGCAA TCATGCAGIT AACATTTGAA AGIGCAGIGI AAATTGIGAA GCATTATGIA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAACTG TATTCTCATA
GAATGATTCC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA
ATCTCCCTCT ACACGCATTT CTGGTTTTCT ATTATTCCTC CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC
TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TTNGNCCCAG
GCATTTGCTG GGAACTT

SEO ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCTGGA AGGICTAGGC TACAGTGAGC CATGITTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC TCCAAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT TATAGATTCA AGCAGTATGT AGGTATACTT TCATAAACTG AATACTGATG TAATTTTGGA TGATTAAAAAA CAGNCTTTTA GTAGGTGTC AAAAATCTGG MTAATTCCTT TCATGACATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA ACTTGCAAAC ATTCANTTGT T

SEO ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CITTAGTATA GCAGAATACT ACAGGTTACC CACATTTAAC CCTAAAAACA AACAAATGAC AGGCACTTCA GTGAAATAAA AAGCCCATGT TCAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA ATGATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNTCCAG TTTAAGCTAA CACATTCCTT GTTTATACAG NITATTTINC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA TG

SEO ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGIT GTGTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTITIN CAGCATAGTG GAAAAGAAAG CCATGGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCNT TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA CCAGATACTA GGGCTCTCT TAACTGCTTT ACATATGINA GTTAACTCAT TTAATCTTCA TGACATCACC CCTGAGATAT GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA GCTGGGACTT TTAAATCAAG GCACTAGATG GTTCCAGAGC TTTGTACTAC TCTTCCTGGG TCTTTCACAG TCTGAGCTGG TCCCGG

SEO ID NO:801: (Length of Sequence = 408 Nucleotides)

CIGCGITCCA TGIAGCGICT TOCACAGINC TCIGITATAA GATGGITIGI TACATIGCIG CAGATATITC TGCATGICIC TIGAGITICT CAAGACCAGG GITGIATITI TCCATGICIG TCGATGAAC AGIACATGAC AAAAGAAGGI ACITAATACA TGITTGATAA AITAATIACT GITTGGIAAA TIAATIATIG AAGGAAGACC CAGACTGGIT CIGATAAATC ATTGATTACA TITTACAAAT TIGGGGAGCC TIGAGAAGTI AGAGCTCIAG GGAAGGITCC AGGGAACGIT TGAAGGATGIT GAAATATGGI TITCAAAATT CATAGITTAT TGCAGGATTC TGGAATACTI TCCCAAGIGA GGGAACGIT GAGGAAGANG ATGGGCTT

SEO ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CICACTATCA TAAGAATAGC TIGGGAAAGA CCCACCCCCA TGATTCANCT GGGICCCACC CACAACACAT
CAGAATTATG GGAGCIACAA TITAAGATGA GATTIGGCIG TGGACACAGC CAGACCATAT TAGACTCATA ATTIGNCITC
TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTIAGA GAGTCACACA
GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN
TTCAGGCAGT GGGGTCAAGA AAC

SEO ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGCCTT NICTAACGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGCCCT CACCICANCC TGTCTTGCTG GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GINATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAAATT NATGCCTGTT GGGGATGACA GC

SEO ID NO:804: (Length of Sequence = 312 Nucleotides)

TITATITACI GCOGITGIAA AINATCACAA AACATATICA TIGICAAGIG AATGCACAGG CITICAAAGG TGATIGIATI CIGCAAGGIG GGGAATAGCC AACTACCITC TAAGGIGAAT GINCAGCCIG CCAITICCAA CCCCAAAACT CCTCTAGATI CTCAACAGGG CAGCITCIGC TICAIGCCIC TNITCGGAAA GGICAGCCCI GIGIAGAAGG CITAATACCA ACATGCAGAT CCACCIGAGA ATCACIGGAA TGCTCGGAA TGCTTCCGGA ACCCAGTCAG GCTINCGGAA AT

SEO ID NO: 805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANIGCA GGGCCTGGTT GCCCACATAC ATTCCTCAGG TTAAGGTGGA TTTAAAGATG CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTCACGT AACAAATGGA GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCA TCACATATTTT GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG ACTGCTACAC AGAAAGGGAA GGGAAGCTGT TAACCCAGCA CAGCAGCACA CCTCACATAT TTCCGTCTCA GAGGTTAAAT GGGAAGGAAG

SEO ID NO: 806: (Length of Sequence = 287 Nucleotides)

GCATTINAGI GCIGATACAG ATACAGIGAG TICCIGCCCI TICCICICCI NIATATIGAA GGGATIATAA AIGAAGCICT
TIAAACATIC TGAGAICINI AAGITGATIT CIACATGAAC TCCAAGIGGI GITAATGACA TITICAGAAA AGATGCITITA
CITAGCIGAC AAGAAAAAGI ACICIGIAAG CCITIATITG TATGIGATAA AACAGAGIIG ATAAAATAAT CIACTATTAA
CITATCAATG CAGICTIACA GAATCCACCI ANITACAAAG TAGATAA

SEO ID NO:807: (Length of Sequence = 369 Nucleotides)

GGCAGATATA ACCITITCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TITATTTTTG
TCATTTGGGA CTAAGTGCCT TACTTAGTTT TGINCAGTGT ATTCATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA
CCTAGTTTTG CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT
ACAAAGATAC AACATGAATC TGAAACTCAA TITAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAACNCAT
CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEO ID NO:808: (Length of Sequence = 361 Mucleotides)

CAGGCTTIGT ACCAGCCGC ATACTCTCCA AAAGATGTCC CATCCTTTN CTTTCCTTTG CATTCTTCTC TTTCTTCAGC
ATGCATCCAG ATGGGTTAT TTTCATCATC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA
GTGTTTCTGC TTGCTTGAAC TTTCCTTGTT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTTCA
TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT
GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEO ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TICATGICCA GIGAGCAGIG TIGCGITITI CCTTGIAGCA TITGGAAATG ATTTACIGGA ATTACAAAAC CTATTITCCC TITAAATTIC AGCTTIGGCT CIGGCIGCIT TITAGAATAA TIGCAAGATAA AAATCACACC TIGAGGGCTGA AAACGGAGAG GIGAATGGAG ACTTGATATT TAAGCAGCTT GAATGGITTT CCNTINCITT ATTTITAAAG AAATGCACTT GCCTATIGATA CTGICCTCC AGTGAAATGA TIACTCCTCC ATTACTCTAT TIGATACANTA TIGTGCATGC TAGTGITGTA TITCTATACA GIGGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGICAATG CITCCCAGGC TCGAGITGAT GCCCACAGGI GIATIGIACG AGCATTGAAA GAICCAAATG CATITCITIT
TGACCACCIT CITACITTAA AACCAGICAA GITTITGGAA GGCGAGCITA TICATGATCI TITIAACCAIT TITIGIGAGIN
CITAAATTGGC ATCATATGIC AAGIITTATC AGAATAATAA AGACITCATT GATTCACTIG GCCIGITACA TGAACAGAAT
ATGACAAAAA TGAGACTACT TACTITNATG GGGAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCCTCTTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA GAGGACGTTG CTGTTTCCAC TGGCTTCTAA TTTTGCAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG GCCAAGAAGAA GCCAAGAAGAA GCCACTCTGAT GGCTGCATGG AGCCAGGGGT GCTGTGACTT TTTTTTAATAG CTTCAGTACC TTTNATACGT ATGTCCTTAT TTACTCTTTA TCTATGCTCT CTTCCTCCCA TCAGCCTGGG AGCTCCCTGG GGCAGGTCTG TTTCTCCCCT CCAGTCCGGA NITCGCAGGA GCTGTGCCTC CCCCATCACA CTTGGAGGCT GTCTNAAGGC AGGGGCTGTG GTCTCTGCCA TTAGACTTA GAATAGCTTA GAATAGCTTA GGAACCTAGG GGT

SEO ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTIGIAAGI NATGCAAGCA AATTCTCACA TAATTATTIT TAAATGCTAG ATAGITGGTA TAATINCAAT
CATTITAAAT ATGITAAGAC TIGITITGIA CCCTAACATG AGGICTATNC TGAAGAATGI NCCATGTGCA CITGAGAAGA
ATGACTGGAG TGINCTITAT ATGIATGINA GGICCAATTA GCITATAGAA TIGCNCTAGI CCTCTATTIC CITATTCANC
TITTGITTGG TIGITGINCT ATCCATTATT AAAAGIGGGG TATTGAAGIC TCCTACTATT ATTGIGCTAT CATCCTCAGC
AAACTAACAC AGGANCA

241

SEO ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGIGGCCIC AGNNCAGCCA AGCIGACCIT GGCACTIGGC IGGCITCINI AAGGCANTAG AGIGCCCACA CATAAGCNCA CCACCINICC CCACCICCIC CCITCICICC CATGCCACCC CACITGCITC CAAGGGCITG GITICCAAAG INACATCCAG GGIGIAAGAG GITGGGGAAA ACGICCIGCA AGNIGGCICA GGGATCINAT ICCATCAGAT GGICICAIGA ATACIGIGGG

AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEO ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC ACCTITIGIA GATAAAGAAT ATGAACTAAT TGACTATGGA TGGAATTATT GIATATAGIC
AGCTTGCTGA ATTATTGGTT AAGCACTACT AACTATATCT TGGIAAACTA TGGIGCAACT GAGCCACCCC CTAAAAGCAA
AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAAA TGAGAGCCTA TGAGANIGAA ATGATTCAG GTGGAGTTTG
ACAATACAAT TCATCCNTAA TATATAGGGN NAAATATTTC CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT
GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CITGITICCC AGGCIGGAGI GCAATGGCAC GATCITGCT TACCGCAACC TCCGCCIGCT GGGITCCAGC
GATTCICCTG CCCCAGCCIC CIGAGIAGCI GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTITIG CATTINAGI
ACAGACGGGG TITCACCATG TIGGICAGGC TGGCCTCGAA CICCCGACCT CAGAGGATCC GCCCACCTTG GCCINCCAAA
GIGCIGGGAC TACAGGIGTC AGCCACCACA ACCGGNCIAA TIAATACTIC TIGAAATTIC A

SEO ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCITIAACA TATIAAAATA GACATGAGAA AAATGIGICA TITGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA ATATAAAATT AAGCCGIATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TIAAAATGTA AAAAAGGNTG CAACAAGAGT AAGGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEO ID NO:817: (Length of Sequence = 225 Nucleotides)

SEO ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTIC ATTACCTTTT TGAATAATCN CATACAAAAA ATGTATTEN TTTTTTGTGC TGTGAGAATT
GATGTTTGTA GATTAATAAT CATTTTGTTT AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT
GCAACCNAGT GGAAACTGTA AGACCNITTG AGTATTGTTT GTTTTATTGG ATGCATTTGG ATTTT

SEO ID NO:819: (Length of Sequence = 280 Nucleotides)

TIGACTAGCT TCCTACGICA TEAAAAATTC TTTAAATAGT CTGTCTTAAT GGCTGCAAAT TTTGTCGTAA GICTGGGCTA
AAATCTGATG AAATGTTTTA CCTGTGGTTA AGTAATTTAG CAACTCGTAT CTTTTTAAAA TATTACAACT GGGNATTCTA
GTACGTCACA AACATTTGTN ATATCATTTA TTTTGTGCCA TTGTCTGTGC TATGAAATAC AGTAGAATGA AAATTTACTT
CAAAGCATTC ATINTCTTCC CCCAGGGNAT GATGGCAAAA

SEO ID NO:820: (Length of Sequence = 328 Nucleotides)

CCAGITAATT TIGTAAAGIT TATAGNGATG GITTCAGITA GACCIGIGCT GICAATACAC TAGCAATTCA CATGCACATT
TAANITITAAA TCIAAGITTA AAITTAAATT AAGITAATAT TAAATAAGAT TIGAAATGCA ATTCTCAGIC CTACAAGCCA
TGCTTCAAGI GCITCATATC CATGIGAGGI TAGGGGCTGC TATACTGGNI AGTGCAAAAA GAGAACATTA TIGTAATCAT
AGAAATTCTA TIGGTAAGIT TATGGGGTAG TACATGGACT AGAATGTAGIT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG
NCACTGGA

SEO ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TITCTGTATG INITGAGATG ATTAITTGGT TITCCTTTT ATTGTGTTAA TITGGTGAAT TGCATCANCT
TTAGTATCTT AAACCAACCT TGCCTCTCTA GGGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTAITGG
ATTAICTTTT TTAATATATT GCTGAGGATT TITCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG
TAATCNCTTT GTTAGAAGGA GTTTATATTA GGNTTTATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GOCAGATIGI NITOCITGOG AGCOCCIGAC COCGGCIACT CITCACCAGA CACGGCCCGG CITTGGCCCA CAACACAGCC GICCCACCCC TGGITCCTTC ACCITAGCAG TAGCAGIAGC TCTGGGTGGA GITGCCAGAG GAGCTGACAG GCCCTCTGCC ACTGCTGCCA CCCCCAGGGC TAGGGAGGGA ACAAAGAGCC TGCTTGCTGT GCTTGCACAT CCAGCATGCC ACAGCTGCAC TACGGNGAGG AGGICAGACA GTCCCCCCAA CAAGNCCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGCG CCCACAGNAC AAAACGTTCC ANCCCGGGCT GATCATTCTG GGTTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTOSCATC CCTGGGGAAA ACCAACGAAC AGTCTCCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG CCCGCATTAC AGCCCATCAT GAGCCCTGGG CINCTITICTC CCCAGCTTAG TCCACAACTT GTAAGGCAAC AAATAGCCAT GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCCTCA AGNCATCAAC CAGCAGTTCC TGAACCATCC ACCCATCCC AGNCACTTA AGCCAGTTCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCCTCTNC ATCCAAGTCG
GCCAAGACCG CCACTGCAGG ACCAGGAACT ACCAAGACCA CCAAGTCATC TGCTGTGCCC CCAGGCCTCC CTGTGTATTT
GGACCTGTGC TACATTCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCAA GAGAGTGCGG TCTTCCTACT
ACGTGGTGAG TGGGAATNAC CCTGCTGCTG AGGAGCCCCAN CCGGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC
TCAGT

SEO ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTC CTCCACCCCC ATTAGCAAAT ACCGTAATAT ATGNCTCTAG TAATCATCCT CTCACAATTC
TNCTTTTCCT AATTINNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC
AGAAATTGTT AGTCCTCAAC TCCAAGGTCT GCCTTGTCAA GCCCTGTTTN CCGTGTCTTC ATAAACCTTG TCAGGCATTT
ATTTATTCAG CACATATCTA CTGINCTCTG CACAAGAATT CATAAGGTTC TGATGAATTA TGTCCCTTCT GAGTGGGA

<u>SEO ID NO:826:</u> (Length of Sequence = 287 Nucleotides)
TACAGACICA GGITATAGGG TGINATTITC TAAGICAATA TICAGITICA CAGCCAGAAT CIGIGAAGAG AGAACAAACC

ATGAGAAAAC TAACANITIT ATGGGGATTG AGAGGTTCCA AGINCCIGGN GITTTAAAAA AATCAGTTTT TAAAGATAAA

CAAACTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEO ID NO:827: (Length of Sequence = 426 Nucleotides)

TITITITIGI TITIGGEACAG AGICICACIC TGICACCCAC GCIGGAGIGC AGIGGOGIGA TCICGGCICA CIGCAAGCNC
TGCCICCGG GITCATGCCA CICTCCIGCC TCAGCCICCA GAGIAGCIGG GACIACAGGG GCCCGCCACC ACGCCCGGCT
AATITITITG TATITITAGI AGCGACAGGG TITCACCGIG TCAGCCAGGA TGGICTCGAT CICCTGACCI CATGATCCAC
CIGCCICGGC CICCCAAAGI GITGGACIAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAAAACAIT TTAAAAATAA
ATATITAGIG CIAAGACAGG ATATGGAGCA ACAGGAACIC CIATATGCIT GCIGGIGGGG AATGCAAAAT GGGIACAACC
ACTITIGGGA CAAACAGITT TAGIAA

SEO ID NO:828: (Length of Sequence = 402 Nucleotides)

GECTECTTEC TCCACTCAAA CAGGTATCTE GEAGCCAGCA CTCTGGCAGT CCTTCTAAGC TCTAACTCTE GTTTTACTGT
TTTNNAGGTE AAACCTTTGT CCTGGGGAAT AGTCTGGCCC GCTCCTTGGA ACCACACTCA GACTCAATGG ACTCTGCCTC
AAATCCCACC AACCTTGTCA GCACCTCCCA AAGGCACCGG CCCTTGCTTT CATCCTGTGG CCTCCCACCA AGCACTGCCT
CAGCTGTGCG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCCTGGCC CTNCTTCCCT CCCTCACTCT TTCCTTCACT
TCCTTCCTGA GCTCTGGGAG GCCAGAGAGG ACCTAGCTCT GTTGCCCTCT GNCTNGTGGT GGGGACTAGG GACTGGACTT
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCCGTTAGG AGTOGGCTIT ATGTGGGAAG AGAGAAAAAA ACTTGGTGAA ATGCTTTCTG GACTAATTGA AGAAAAATGT
AAACTACTTG AAAAATTTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGACGATGA
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAA
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAAAT CATTCTNGCA
AGGTTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GEITTEAGAG TAGAACAGGA AGITGTEAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGGNTCCC CAGGCAGGAC
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCCAGCACT TTGGGAGTCT
GAGTCGGGTG GNICACCTGA GGTCAGGAGT TCGAGACCAG CCTGACCAAC AGGGTGAAAT CCCTTCTCTA CTAAACTACA
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAATT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGGAGT
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTICACAG GITGIGICIT CIGAAATCIG TACCITCITA CICATAACAT TIAATGIAGC ATTICICAAC CIGACCAATC TGCAGAAAAT ATATGICATA TATTAATTGI GIATACATGA ATATATGCAT TTTCCTGGIA AAAAGICATA GITTINCATA GAGTICATGI AATCITTITAA GAGATTCICA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTITAGA TGAAAGGGAC CICCTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTITTIGAC ATGACAGATT CATAATGGIT

SEO ID NO:832: (Length of Sequence = 402 Nucleotides)

CIGITITCIC CITITGITTI CCIATTAIN CICCCAGIGC TAACITGATA TCINCITGIG TGIACACGIG TGINIGIGIG
CAAATATATI TCTAGGAACA AGAGCAAACA TICTAGTAAC TATCATTCIC TGATGGGAG AACITGGGCA GAGATCIGAG
TTACAGCITT GIGGATTTAT TCTCCTGAT GAGAGATCGC CCCTTAGAAT GICATGGICC TAACCCCGIC ATGGATACCA
GGGGTGAATG GCAGGGTTCT TCTCCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGICA GGTCACCTGT
CTTACCACCT TTACAGCTAG GCTTTCTGAG GIGCCAGCGT CTCCTGGGAA TTCAAACTGT AGTTTAGAGG CAAGCTGGGT
GA

SEO ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTC CAGAGATCAG ACCTCTTAG ACATCTGAGA NITCATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG
GAAAAGGCTT CTCCCAGAAC TCAGACCTCA GTATACATCA GAAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA
TGTGGGAAGG CTTTCACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGG GAGAAACCTT ATGTATGCNC
TGACTGGGG AAGGCCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNNTTCATAC TGGAGAAAAG CCGTATGANT
GCAGTGACTG TGGGGAAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNTTNACANC CGGGGAGG

SEO ID NO:834: (Length of Sequence = 394 Nucleotides)

CITITITIGIT AGICIGIAAA ATCATITOCA GGIAAAATCI AGAGCIIAAT CCATATGING TGCCATCITI TGCTITICCA
CACCICINAT CCIAGGIAAG TNAGAGCIAA GAGTATTIN CIGAGCITCI ATTATGGGCC CAGCATATGI NATAATICCI
TITACACATA GGAATCIGAG GCITAGAGAA GITTACIGAT TTACCIAATG GCACACCATA AGINCIGGGG CTAAGATITA
AACICAGGIC TCCIGACTIA ATTCAGATGG TCAGCICGAT GGIAATCATA ATAATATIGI NGIIGITGIT GITGITGITA
TNITATCAACA ATAGIAGIAG CTAAGICCAT TTCATGAAAC AGCICATTGG ATAGICCCAT NIGGATAATT CIGA

SEO ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTTCTGCC TCTATAGATT TGACTATTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATATA AGCAAAAGGT
AACAACAAC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC
TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTC
CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAAGGGCAG
GAGGGATGTC TCATTGAAGA TGACTGTTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC
CCAATCTTCA ACACAGCGTG GA

SEO ID NO:836: (Length of Sequence = 408 Nucleotides)

CICAAAAGAG TIGGCATCIC AGAAGGGAAG TGTAAGINAG ACAATIGICA TIGATGATGA AGAGGACATG GAAACAAATC AAGGGCAAGA GAAAAATICC TCCAATITIA TIGAACGAAG ACCICCIGAG ACTAAAAACA GAACCAATGA TGIGGATTIC TCCACTICCA GITTITCAAG AAGTAAGGIA AATGCAGGAA TGGGTAATAG TGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT TCAGATTGCI AATGTTACAA CITTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCCAATT AGAAAATACT GACGGCCGAG ATATGAACTI AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTI GGGAGGATTG TCTCTAACCG GGACTGCAGT CCAAGTAA

SEO ID NO:837: (Length of Sequence = 347 Nucleotides)

TOSCICIGIT GCCCAGGCIG GAGIGCAGIG GCACGAICIC AGCICACIGC AACCICIGCC TCCIGGGITC TAGCGATITG CCIGCCICAN TCICICAAGI AGCIGGGAIT ACAGGCAIGC ACCACCACIC CIGGCIAATI TITGIATIIT NAGIAGAGGC GGGGITITGC CATCITGCCI AAGCIGGICI CGAACICCIG GCATCAAGIG ATCCATCCAC CITGGICTIC CAAAGIGCIG

GGATTACAGA CGTGAGCTAC TTCACCTGGC CTTGTTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA
AGTCCCAGAA TGGATTTGAT TTAGGGA

SEO ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTAACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCCTG
TGACAAGCCA AATACTTGTT TTTTTGTGTG TGTGTGTTTC CCCTTCACTT TTCATTGTAT GCCCTTCAGA AAAATCTGAG
AAGTGGGCTT CCATTTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCCTTT TCCTGCAGCA
TTACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEO ID NO:839: (Length of Sequence = 387 Nucleotides)

SEO ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC
ACAAACCAGT CCCTAACTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTTNATGGCC ATGAAATCTG
TTTTTTCCCCCA GTNCTCTAGT GTAATTTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT
CTGTTCAGAA GTAGTAACTA TCGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTIT GIATTIGCCA AAACTIGINC TGIAGCAGIA AGIGIGAAAC
AAGITTIGCIA CATTITCCTI TTTGGITTIA CITCGITGGG GCTTTITTGI TTGGITGGIT TIAAAGGATT TAGGGGATIG
GCAAGICAGI TTGICAGATG TCAATGAACA GAAAACCTIAA GAAAAAAGGI AGCAAAAGIN CTGCTGGCCC CAGATGGATT
TINCCTIAAG TAATTICCTA ATCATTAGIT ACAGCTCTGI GICAAAAAGAT GIACATAGAA ATTIATGCTA GATTCTITAAC
ATCITTCCTT ACTGIGIGCA GAAATG

SEO ID NO:842: (Length of Sequence = 326 Nucleotides)

GITCTITGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCICTGGG ACACATICAA AGCAGTGTGT AGAGGGAAAT
TTATAGCACT AAATGCCCAC AAGAGAAAGC AGGAAAGATC TAAAATTGAC ACCTAACAT CGCAATTAAA AGANCTAGAG
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC
ACAAAAAAACC CTTCAAAAAAA TCANTGATTC CAGGAGCTGG TTTTTGAAAA GTTCAACAAA ACTGATAGNC CACTAGCAAG
ACTAAT

SEO ID NO:843: (Length of Sequence = 380 Nucleotides)

GECCTICADA TIACADADAG CANTITACAT TATAGIANTA GITCATGITI ATAGIACAG AACAAGAATG AGITAAACIA
AATATICCAA ATCAGIACAA GINATINCCI TITTITTITI TIGAGACAGG GICTCACICT GICACCCAGG CIGICITGCI
TITGICATCCA GECTGCAGTG CAGTGGAGTG GICACAACTC ACTGCAACTT CAGCCTCCTG GECTCAAGCA AGCCTCCCAC

CTCAGTAGCC TCCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTCGC CATGCCCAGC CTAGTGGTAT TITTAACAGA TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

SEO ID NO:844: (Length of Sequence = 257 Nucleotides)

TITOCCICIC GITGCCCAGG CIGGAGIGCA ATGGCGINAT CITAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT
TCTCCIGCCT CANCCICCCG AGTAGCIGGG ATTACAGGCA TGINCCACCA CGCCIGGCTA ATTITUTATT TAAGIAGAGA
TGGGGITTCT CCATGITGGI CAGICIGGIC TCAAACTCCI GACCICAGGI GATCIGGCCA CCTCGGCCIC CCAAAGIGCT
GCGATTACAG GIGTGAG

SEO ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CITECATIAC CIGECAGIAA GCITEGAGAG TAAGITITIGC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC
TTTGCAGATC ACCGCAAGIA TITGTATITC ACTCTAAATI AAACAGAAAA CCCAGGAAGG GITTTAGGCA GATAAATGGC
ATTATITAGI TICTGTATIT AAGICATCAT TTAGGITACT GGGGGAGGCT GCCCTGAAGT GGATCAGAAG TAAAAGGCAG
AGATACCAGC TAGGAAGCTG TTGCAGIGAG CCAGGIGAGA AGAGAGGCC ACCTGGACCA GGTAGAAGCA GTACAGGIGA
AAAAANTCAG ACACTTCCAA ATCTTCCTCA AGATTTNATA CATTATITGG CTGGGCACGG TGGGCTCACA CCCGTAAATC
CCAGCACTTT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CIGTCTCAAA AAAACAGTGA TTGTTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC
AATATCTTAA CITTAAATTT TCAAATACTT CAAAACTAGT AAGTATTACT ATGTCTAAAG CACAGTGCAG TCCAACGGAN
TATGTGAGCC ACATATATAA TITTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEO ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCCTTCAT CGCCAAACAG CITTCAGAGA TAGATGCITT GITTCCAATC GAGCATGCTA TTCCAGTGTA CTCRACATAC TGT...'ACCTC GTGTTAGGCA CCTTTATGAA GAGAINAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT TTTAATAGCT TCATGTACAG CATGCTGCTT GGTCNACAAT CATTAATTCT NCGATATTTC TGTAGCTTGA NTGTAACCGN TTTAAGAAAG GTTCTCAAAT GGTTTG

SEO ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCCTOGGTC CCCTTTTAAA AATTACTTTT CAGCOGGGCA TGGTGGCTCA NGCCTTGTAA TTCCAGCACT TTGGGAGGCT
GAGGTTGGAG GNTCACCTGA GGNCGGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATAC
AAAAATTAGC CGGGCGTNGT GGCACATGNC TGTAATCCAG CTACTCGGGT GGCTGAAACA GAAACCACCA ACGNCTGACC
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEO ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTINC TAGTEAGGAG TEGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA
CCTGGGAAGT GGGGCGTGC TTGTNTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGGAAGCCAC
TGAGTGTTAA AATTAAAAGC AGTNGGGCT GGGCACAGTG GCTTACACCT ATAATCCCAG TACTTTGGGA GGCCAAGGTG
GNTGGNTCAC CTGAGGTCAA NGAGTTTNAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEO_ID_NO:850: (Length of Sequence = 320 Nucleotides)

ATGICIGCA ACTCAGGAGC AGGGCAGGAA TCAAACTITT TGGAGTTGCT ATCAAGINCT TGATTTINCA ATCCCAACCG
TCCGCAGAAC ACTAGATGTG TGNATGINIG CITGIGTGTG CATTTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG
NCAGGAGTING GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTAATCT
GGTTTCCTAA AACCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEO ID NO:851: (Length of Sequence = 170 Nucleotides)

CATOCAAGAT AOCAAGATAT ATGAGGGAAC ATTINNITTA ATAAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNIAA COCCAAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA ACAGTTGITA

SEO ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGIACAC ANGIGIATIT ATTACATTIT GCAAGCACIC TGITCTACAT TICAAAAACG CCACCNICAA GCIGITGGCA
CATTIATGIA CAAAACAGAT TAATIGIAAT GCCIGCTACA AAGCACTCIG TGAAAATACA AACTCTAATA CCAGAAATAA
AAGCCAAAAG TGICAACATC ATTACATAAG TNGAAAAGIC AGTTITNGAA ATTATCACAA ACTGITATCN CACGGAACIG
AAATACTATA ATATAG

SEO ID NO:853: (Length of Sequence = 281 Nucleotides)

GRATGINGIT TCTCTTCTCT TGCTGCTTCT AGGATATITN ATCCTTGACT TTAGGGAGIT TGATTATNAA ATGCCTTGAG
GRAGATATITT INGGGTIAAA TCGGCTTGGN GITCTCTAAC ATTCTTATAC TTAGATATIG ATATCTCCTT CTAGGTTTGG
GAAGATCTCC GTTGCTATTC TTTTGAATAA GCTTTCTACC CCATCTCTT CTTTATCTCC TCTTTACAGC AAATAAAGTT
TTAGANTTGC CATTTINAGG CTATTTTCTA GACCCTGTAG G

SEO ID NO:854: (Length of Sequence = 255 Nucleotides)

TCIGICCAGG ATTATTACCA GCIAAACCAN GIAATGGGG TCIATGCCTG ATGAAGAACA CCTGIAAAAG CTGGAAAATG
TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCCAGAAG
AAACTANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT
TTAATGAATG ATTAG

SEO ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCIGIGG TOGIAACCCA CCAGAGIGAG CATGCITNCT TCINAGGATA GACGITGGGI AGIGGGATIG GCGAGAGGCA
GGACAGAGGC TICCGITGIG TCICICIAAT TCATIGITTC TIAAAAAGGA TITGGGCTA CAAGITTCAA ATACIAAGAT
TINATAAAGI CACATGGATT TIAAAAAATC ACTCTATTGI ATGITTGAAA CATTCCATAA TITAAATAAA AGGATTGGIA
TIATATATGI NCTIGAGITG CIATAATGIT TIACGGITTT CCTTTGCTTC ACTTTGAAT TNINCGAGGA TCTCCTGGGG
GAAGNITCAG TCG

SEO ID NO:856: (Length of Sequence = 230 Nucleotides)

TTINAGACAA AGICTIGCIC TGICACCCAG GCIGGAGIGC AGIGGCGCAA TCICGACTCA CIGCAACCIC CACCINCIGG
GITCAAGCNA TTCICCIGCC TCANCCACCC AAGIAGCIGG GACTACAGGC ACGIGGCACC ATGCCTGACT AATITTITGI
ATTTITTITA GIAAAGACGG GGITTCACCG TGITAGCCAG GATGGTCTCG ATCICCTGAC CTCATGATCT

SEO ID NO:857: (Length of Sequence = 334 Nucleotides)

AAAAACAATT AGTAAAAATT ATGCATTAAG GAATTATTTA CTAGACTTTC TGGAAGTAAA AAATAAGTCA GCTGGTTTTC
CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA
TTTATATACT GCATTGACCT GGCATGTTAA TATTINCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGGTTTTT
TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT
AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GEAGAAACEC CTAATGTAGA TGATGGGTTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG
CACGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT
ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT
TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCTT TACATTCCC TTTAATAAAT CACTTCCCTG
CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAAG TTATTTNCAA TAAATGGTAT GTACATGANC ATCAGCAAGC
TCCAAGAAAT GACTCGAGGG CCTTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC
CAGGGATTTG GACGTGTTT TTGTTAAGTN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTTCCAGA AATTAATTGT
AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACENIATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA
AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCCTT
CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCCT CGCT TCCTC CTCCGCTTTC CCTAAAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GOGCAGGIGI CAGCGCCCGI TICACCGCCA CGICGCGGAC AIGGIGATII CAGAAAGIAT GGATATACIC TICAGAATAA
GAGGAGGCCI TGATTIGGCI TITCAGCIAG CIACTCCIAA IGAAATITIN CICAAGAAGG CACIGAAACA IGINITGAGI
GACCIGICAA CIAAGCIGIC TICAAACGCC CIIGIGIICA GAAITINCCA CAGIICAGIG TATATATGGC CIAGCAGIGA
CATAAACACC AITCCIGGAG AACIGACIGA IGCIICIGCI TGIAAGAACA TACIGCGCII TATICAATII GAGCCAGAAG
AAGATAT

SEO ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTTGT CCTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCAGTCT CTGCGGGGAA AGGACGGCAT
TGGGGCCCAG GGTGGAAAAG GGGTCCTGGG CTTCANCTGA AGGGCAAACT GCCCAGTGTA GGAGTCCGTC CAGGACAGGC
AGGCAAATNC TCTCGGGGTA TGGAGATAGG TCCAACTGCC CCGAGATGTT GGCGAGTGTA ACCAAGGTGT TTTCCCGGAG
CATCTCCAAG CAGTCCCACC ACCACTCCAC TTTTTTGCAG CTCACCCCTT GGGTCCTGTT CCTNCTCCTT TTCATAAGTT
AGTGGTGCCT GCTTTCCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA
TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAAG GAAAGACATT TTTNCATACC AACCTTTCCC TAGTTCGCAG
TTTCCGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA

TTAACCACTG AAGINGTCTT TAAGGACAAA ACTTAAATTT TAAAATGGGT GTTACCATAT TINATGAGTG GACTGACTCC AAGGTTGCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEO ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGINT CITGAGATTA TCATCCGCTG AGGGTAGAC TGAGGGTGGA AGGGGAGINA GCAGACACTC GGAAGGTGTC TINAGGCTCA GGGAGTTATC AATTATAGAA TGITGITGAG TTGGAGGAGG TGGCTGGTGG CCCATCCTGT TITTTAAAGT TTCANCTGTG AGGTAGGGCCC AGTAGGGCCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCOGGGA GGCAGAGGIT GCAGIGAGCA GAGATCACAC CACIGCACTC CAGCCIGGGC AACANAGCAA GACTCOGTCT CANAATTITN CCAAAATCIG ACGGAAAGAA AAGAAACAAA TGGITCAGAT GGGACGGAGG GTGGGGGAGGG GAGIAGGAAC CAGGAGGGCT GCCIGGGGIG GGGGAATAAN TIAAAAAAAG GAACGAGTTA ACAACAGC

SEO ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGIC AGAGAGGCCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC
AGACTTCAAG CAGTTTACAA ACGAAACTCA CTGTTAAAAG CTGTTAAATC TCATTAAAAC AGTAGACGAG TGCTTTAGAT
TCTCTGAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAAG CATCTTTACA GATGCATTIN
CTTGAAAAAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA
NTAGAGTG

SEO ID NO:867: (Length of Sequence = 361 Nucleotides)

GITTCATGGC ATGINAAAAT TATGTGAAAT TCAAATTTTA GTGTCCCCAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC
ATGINTTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGG GCCTAAAATA
TTTCCTATCA GACCCTTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCCGGCCAGG
AGTGACATCA AGGGTTTGAA GCAGACCCTC TGTCCAGGAG GGAGCCGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCTCTTGCN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGTT
CAAAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAACTCAG CTAACCTGCT
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTTGTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTTATTC
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCATT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTCAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT
GAACCCTGTG CATGCGAGGG ATGTGGGTTG CACACTCCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT
CATCCTGAAG CCATCCCTGT GCCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACCAGTT TTTGGGGCCCA AAAAGATTGA
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTTAAACT AAAATATTNC TTTAAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

CAGCITIGCA AATCAAATAG AATICATITI GCCTCCNCTN ATCITACAAC TATTCICIGG AGIAGGCAGG CIGGITGAAC
TICAAGAGAA GAGGCGITCC TGAGAGCCIC CITGGTGAGC TIGCACACCI GGGGGCCAGA TGINCITIGC CCTCCTTGCA
AAGCCTCTCI AGICIGGIGC CCAGAGAATA CAGCITCAGC AGCAGCTCAC TITGCTITIN AGITTAGATG AGAAAAAACA
GCAAAATAGI CCATCAAGGA CAAATICITG CCAATGGATT INCITITIGCA AGGANGITCA CCTTTCNNCC TCAAGCATCA
TCITTAAGIT GIGAATGCCI GATGGGAGGI CCAGGITGCN CTGIGGGAGG AGCINGGGGI GCNITCCAAA ACCACCTGGG
GACCAGIGG

SEO ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTGCATT GATAGATTAG TTATTTATGC CAGINGICIC TGTCTGCCTT GITTTGGTT TNATTGCATT TGTTTGCTAG
AGATTCGTTT TAGTTTINCA ATTTCTTTCT CIGTACACCT GCCCCICCCC CACCCCACCA CTGGGTTACT ACCTCCTTTT
TGGCACTACA TGATGCCTTA AGCCCAGGNT TGCCTAAGCT TTCATAACAG ATCCCAGCAC TGCTCATCCC CAGTGGTGGA
GGINCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGGTTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAC AAATTIAAAA GCACTCAAAA ATAACCICAA AAAGAGACTA GIGAGIGICC CITAAGGAAA GCCCTICCIG CAGATTCCCA CAGAACICGG CCCAGGCACT TAACCTCCAT CICAGCICTG GTACAGCICA CIGCGTACAG TGIGTACCAA ACTCTTATGC CIGGNCIGCT GATAAATTCT ATTTATCICT GAACCTCAAT TTATTCAAAT CTAGITATGA TATATCATAG TGCITGTAAT TGITGTAAAA TATAGANGTA ACATACAGCA TGIGTCTACA CGNTTAATAA ACTGGIGCTA ATT

SEO ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAAACT ATCGT.CAGA
AAAATTACAA ATTCGTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCTTT NGTTTTCCTT
TTTTTTTTTTT TTTTGCCAGA AAAGTATTCT TNCAATATAG AAAATCCTAC ATGTTACCCT GCATGTGGCT AGGNTATATC
ATAACGGAGT TTGTACTGAG TCCTTCTGAT TTGCTGGATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TECTGAGAGA TIGINAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA
TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GIGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAACTGTT
TTGTGATAAG TGAAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAAGAN GAAGGACTTG CCTGANTGAC
TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT
CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEO ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGICCAA TGCAGATTAG TATCACITTG CTCATAAAAG AGAGTATAAA GGTTCTTGAA GTTTTTGAAA GGAGCGGCIN
AGCTGACTGT TAAGGAAGCT ATCTTTTGTC TACAAGAAAT TTATACITTT CCCTTCTAAA TTTCACAAAC AGAATATTAT
TAGAGACAAC AGAATACATT TACAAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCTNCT ATTAATGAAA
TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TTNCCAATAT TCTAAGGNTG ANCAAAGNNG
GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTTNAGCTT GTTGGGGTCA GTGGATGGCC ACAAGGGCAC CCAGTGGTGG TGCCCGGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTTCATT CAAACCTGAC AAGTCTATCT CTAAGAGCCG 251

CCAGATTTCC ATGIGIGCAG TATTATAAGT TATCATGGAA CIATATGGIG GACGCAGACC TTGAGAACAA CCTAAATTAT GGGGAGA

SEO ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGITGC AGAAAACTGG TTTTGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA
GTCAGCTCCG TTCTTGGTGT CGCTTTCTTG CAATTTTTTT CCTCCCCTGG CCCTTCCTGT GAGGGTTAAA AGGGCCATCT
CCAAGCCAGG TGGAGCCCCA ATCCCATTGA CCAAGAGGGC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCCTAA
AGGAGCCCAA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT
CCAATTTCAG TTGAACCACG ATGTGGTATA CACTACAAAA TGCAGATTCT GGTGCCCCTC TCCAAGAGTC GGCCTCAGTT
AAAA

SEO ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCECTE TECTETTESC ACGAACACCT TCAGGGACTE GAGCTGCTTT TATCCTTGGA AGAGTATTCC CAGTTGAAGC
TGAAAAGTAC AGCACAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCCAAAT
NTTGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAAGT TTTATTAAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC
AGTGGCCTGT TACGGTTGGG ATTGGTGGGG TGGGTTTAGG TAATTGTTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATTCTGTCA CAGGGACATT TGTCTTTNTC CTTTAATGCC CAGTAAGGGT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGCGAACCA TCTTGCTCCA CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEO ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCIAGGCA CCAGGCATTC TGTGAGGCCC CAGGAGTITA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAACTG
ACTCIAACGA GGAGACTTAA GANTIATTTT GIAATCTCIA GITATATTIN CTGAATTTCA GAGCITAAAT ATTATACTTC
AACATGAGTC ACACCITTAT TTATATGTTG GITTGTCTCA GCIGIGITGT GGGTTGGTGG AAGGAGACCA CACATACATA
CACACAGAGT ACATACATGC TGTTGATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG
TCACA

SEO ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTINCAG TCAAAAGICC TIGAAGCIGG GACCCTITGA AAGICIGICA GITACATGIT GITGGIAGIG GCTTGTTTIG
ACCGTTTCAA AAAAGGAAGA AAAAACCACT TAAAICATTT TICCITTCIC TITTCIACIG CAAAGGCCGA CGAGATGAA
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGCCAG AGGIGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT
CTCATCGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGIGG AGCAGGCCAT AGAGGIGCTG
ACCCGCTCCA GCCTAG

SEO ID NO:882: (Length of Sequence = 369 Nucleotides)

TGCCATTAGC AACACTGITC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGATT GATTGAAAAT
CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT ACACTATACC
AACTTTTACC CAATTTGGAA TGAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCCTTTTG
TGGGAAAGAA CCAGAAATTC TTTGTCATAT GTACCCATTT ATCTTATTTN AGTTACCCAA CCAAAAGATA AAATAATATT
CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTTTAT AAATATTAG

SEO ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGCAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT
GTGATCACAA GGCATTGTCT GTGGGGATTTT NCCTTTCCCT TTCTTGATCT CTCTTGTGTT TCTAGGTTGT TTGGTTGTTC
ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGCCT GGTGTCACCC TGTTCCTTTA CACTGTTGGG
CCAGGTGCTG CTTGTCCTTC TTAGGGCCATC ATCAATTGCA AATATTTCCT TTTGCTCCCT TTATGAAGAT GTTCTTATAC
CCTTGCTTTT CCATATTTTT TNTGGGCCAA GCAATGCCAT CTNCTTTTA

SEO ID NO:884: (Length of Sequence = 327 Nucleotides)

AGITCATCIT TITCCAGAGG GGTCTGGGTG CCITTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG CTGAACTTGG ATTCAGAACT CTGAGGCACC GGGATGGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGCACA GGGGCATAGC CAGGAGGAGG CTGACAGGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATTCTTGA GCACAGCTTC AAATGGCAAA GTGGGCT

SEO ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAAGCTT ATCCACCATG ATCAAGTGGG CTTCATCCCT GGGATGCAAG GCTGGITCAA TATATGCAAA TCAATAAATG
TAATCCAGCA TATAAACAGA ACCAAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCTT TGACAAAATT
CAACAACCCT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAAA ATAATAAGAN CTATCTATGA
CAAACCCACA GCCAATATCA TACTGAATGG GCAAAAACTG GAAGCATTCC CTTTGAAAAC TGGCACAAGG ACAGGGATGC
CCTCTCTCAC CACTCCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEO ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CIGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAAG GAATGAGTGT TTCANACTTA GCTGACAAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CICATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT GGCAGAACAG AAGGCCACCG AAAAGCCACACCACCACACCACTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG ACTCTGCAGT AGCAAAAACCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA GATGCCCATGG GAAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCCACAC TGATTCACTT TCGGAGATGT

SEO ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAACTGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT
ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA
CCTGGAGAAG AAGCTCCCAT TTTCATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG
TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCCTTGTTA TAAAGTGGCA
AAGGAACTTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEO ID NO:888: (Length of Sequence = 318 Nucleotides)

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ATCITECATE ATTAATACTA TIGECCTGIN CCCTTTATCC TCAGCTGGIT GTACAATTCT TGAATGCTTT CITCTTCCCC
TGAGGATGCT ATAGATATTG TCCTACTGIN ATCIGAAATN AGTCGTTTTG GAGAAGTTTC TCCATCCAGA TACCTATAGA
GTCTGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGCNCT
TTAGTGTTGT GACAGCTTTG GCCTCTTAAA ACTGCAGGNT TACAGGCATG AGCCACAGTG CCTGGCCCATC AAGTAGCA

SEO ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCI ACGIAGACIT CINCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG

AACIGIAACG GCCAACAGIC CICAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTICTICT CAGTCCAGCA
ATTAAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT

AATCIGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC

TAAGGTTTAT AACCAGCATA TTTTTTACT

SEO ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGIAGGG TICGIAGGIA GGCCIAGIAG GIAGGGITAG TAGGIAGGC TAGIAGGIAG GGCIAGIAG TAGGITCGI AGGIAGGGIT CGIAGGIAGG GITAGIAGGI AGGGITCGIA GGIAGGGITA GIAGGIAGG TICGIAGGIA GGCTAGIAG GIAGGCCIAG TAGGIAGGC TAGIAGGIAG GGITAGIAGI TAGNGCIAGI AGGIAGGCT AGIAGGIAGG GCIAGIAGGI AGGGITCGIA GGIAGNGITC GIAGGIAGGG TIAGIAGCCC GTCINTCCIT CITCCACCCT GGNINCITGI AÀAACNITAT TITACAAGCA ATAGGAATIT G

SEO ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCIGGCIG CGCACCAGGA CCGCNIGGAG CAGATCGCCG CCATIGCCCA GGAGCICCAC GAGCIGGATI ACTACGACIC
CCACAATGIC AACACCGGI GCCAGAAGAT CIGIGACCAG TGGGACGCCC TCGGCICICT GACACATAGI CGCAGGGAGA
CCCTGGAGAA AACAGAGAAG CAGCIGGAGG CCATCGACCA GCIGCACCIG GAATACGCCA AGCGCGCGC CCCCTICAAC
AACTGGATGA AGAGCGCCAT NGAGGACCIC CAGGACATGI TCATCGICCA TACCATCGAG GAGATTGAGG GCCIGATTCT
CAGCCCATGA CCAGTICAAG TCCA

SEO ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCCAGCT
ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTTGCAGT GAGCCAAGAT AAAAAGAGTG
AGACTCCGTC AAAAAAAAAA AAAAAAAATA TATATATATA TATATATATA TATATTTINEN CTCCAATCCC ATCTAGGTTG
CTGCAAATGC CATTATTCA TTCTTCTTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT
TGATTGATGG GCGTTTGGGC TGGTTCCACA TTGTTGCCAG TTGCAAA

SEO ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATAIT TATICCAAGI TAGITATIIT AIGCAGIAGI TICCCCCTCG AGACIIGIGA TAACCACAIC TITTAAATCI GIAAATAAIG TIATCAAAAT AAICIIAAIC TITGAAATCI CACAAAAAIT TATATITIAC AAICCACCCI GAATAICAAG GCIGCAAGAN TAACACAACA TITCCIATAT CCAAATAITI TACAGCIGIA CCCAAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TIGITTGGCT CIGAGGCTGT TAAGTCIGGA CIGATGCTGG AAACTAATAT CAATGTTTAA CAGGGTIGAC TGICATTAAT GATGIGCCTA GCIGIGGGIA CAGATGCTTT GCACATTACT ACCCTCTATT CICACAATCT TCCATGGGGG ATGITATTAGA ATCCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GINCAGGGTG ACACAATACA
AAGTGTCATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEO ID NO:895: (Length of Sequence = 304 Nucleotides)

GGICIAGATI CAGTIATGAA TGIAGGCATI AGTIAAAATI AACAAGATGC AGAGIATTAA TITCTIAAGA CAACAAGTG
ATTICTGIAA GTITGAGCCC TATGIGGAAA GCATTGIGGA ATCITAACCT TTITGIACAC ACTCTTGIGG GACGIATCAT
ATAAATGICA GCACTAAGTA ATGICTTGIT TGIGGCIGAA TATTTINCGI AGATGTTTT GAAGTTGACA TGACTTACGT
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGIAATTAA GGATTINAGA ATATGGGTTG TGGG

<u>SEO ID NO:896:</u> (Length of Sequence = 337 Nucleotides)

SEO ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCINA GGICAGGAGI TONAAACCAG CCTGGCCAAC ATGGCAAAAC CCCGINICTA CIAAAAATAC AAAANINAGC CAGGIGIGGI GGIATGIGCC TGIAATICCA GCTACICAGG AGGCTGAGGC AGGAGANICA CITGAACAGG GAGGIGGAGG TOGCAGIGAG CCCAGGGAGA CCCTGCCCCA AATAAAGAAA TAAATAANIA AAGGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCCTGG

SEO ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGGAAGGGCG GTCGCCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC
ACCCGNAAAG GTGTCTAAAA ANTINAGCTT TTCACCCACC TGCCCCTTTC TTTCAATCCC ACGCTGTTTC CTTTCAAAGT
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEO ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGGTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCTNIN AACATNAGTG
TGTGGTGCCT CCCAGGAGCA GGGATTTNAG CNAGGCTGCT GACACATAAA CACACCCCCA CCTCCAGAAG CAGAGGAGAG
GAGCCCAGGG CCAGGGCAGG TAGCTCAGCA AGGACCCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA
GGGTCAGAGA GGAGAGAGCC AAGA

SEO ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA AAATACCACT GACAAAAAGA ATAATGAAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG GAAAAGATAA TAAACCCNAA ATATATTTGA NAGGTGAATG CTTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGTAAT GTTGAACCAA AGGTTAATAA TATAA

SEO ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTTGG TCAAAGTGGC GATACAGCAA GGTTTGCAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG GATCTATCAA A

CCAGGATGCT GIGTGIAGGC GIGGGAAINT GIGCTIGGGG CAGACTIAAA CGCCATTGGA CAAATAGGAC ACTIGIAGAA GACTICACAG TGAGAACCIT GAAINIAAGA CITCAGAGCA GCCACATCAG AGIACACAAC CATTGCAAAAT GCACCACATC GAAAACCAAC TCTCCTCGIG TAGINCAGAC AGITCTITGT GGCGIGGGGT CINGGAAGGT G

SEO ID NO:902: (Length of Sequence = 331 Nucleotides)

GGITGCCAGT GATCICCITT CITATCACCT ATAGACAGCT TGCCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT

ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGINIGCCCA AGGICGCCTG GNCTGCAAAC AGCTCTCCAG

AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINICCT CTTCTGTTGA TGAACAAAGG TTGATTCCAT ATCGTGGCTA

TTGTGGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGGNT

SEO ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA
ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTC TGCTTTTAAT AATGAAATAT GTCAAACTCC
TATAAAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGGNTAATAG TAACTGAATA GCTAGTATTG
AATAACCAAG CTTCCTTTTG TTGTTTTGNA CATTGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEO ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGGTTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCCCINTGGG GTCTCTGTGG GGCCAGCCCC TNATGCCCAT GTGGCCACIN ATGCCCAGCT TCCCCCAACA CCCCANCACA GGCCCAGGTC AATATTACAA AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCGGCCAG CAGGGGTAGG GGAGGNCGGT TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEO ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GITGAACCIT TIAAAGIGCI GAACACAAAI CCAAATICGA AIGGITCAAG CAGCOGIGAA AICGCICITC
AIAAAGIGGG CITAATICIC TAGITTAAGI TCITTIGAIG GAAIGAATIA AITAAIGIGI CAGGIGGCIT AITIGIGGAI
GCCATGAITG AIGAIGITCA TITTAAGCIC TIACCIAIAG TACAAGIACA TGAIGCIACI GAAIATITIT TCCACITGGA
AACIGIGAGC TGGGITGITG CATTAAAACA CACATACANA CANAATCANN AAACACIGCG GACITTICAC TCAAGCIGGG
TCITTICITC CCCAGIGGIA AGGGCAAATC CIGGCCTANC TAACCAACAC CCAC

SEO ID NO:906: (Length of Sequence = 375 Nucleotides)

CTEACTEANA GECTCTTTCC AGCTCCAACA CATGAAGGIT CCATAATTIT CCCCAAATGI CTGCCGCTCT GAAAACITCA
ACTATCTTAA TATTIGIGAC ATTTATGCCT GIGTATGGCA ATCTGATGGI AAAAGGAGCC ATATGTAAAT AATAACTGAA
ACTTTGTCAA AATAATGITA AGGAAACATA ATTAGCAAAG CAATATATAA TINCAAGTCC ACTGATTTAG AGAATCAGAA
GTAACANTTA GAATCAGAAA TAACAACTAT CTGGCCAGGGA TGGAAAAATG AGAGCAGATA TAAAAGGTGI ACCCCAACCC
CTGACCCCAC TGCCCATTTG GGTGTGCACT ATGTNTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GIGCIGACIT CAGCAGCCCT CIGAAAGGCC CCTTCCATAA GCIGGGAAAG TATGATCATG GITTCATCAT CCTIGITGGT
TATTACTTCA AGGITGACCA ATCIGAAAGC TCIGIGGAA GAAGGGGACT GAGIGGCIGI GAATGATGAG ACCGITGITT
AAAAGCCAGG CTTAGCCTGA GGTCCGGAAG AAGCAACCTC AATGCTGIGC TTTACCATAG CACCACCTGC AGGIATCCAG

GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC
TCACTAGTGG GGAAAACAAT TTTACCCCCC TGTATTTAAA TATGGGGATT TCAAGGCAAA CAAAAGCATT

SEO ID NO:908: (Length of Sequence = 207 Nucleotides)

CITGCATACA GGIGGIAAGI TATTACATTA TITCINCCIC CIGICIACCI GCAGITGGIT TIATGAGGGG CGITAGIACA

CITCCCAAAG GGCITGCCCG CAGGITNAGA GGIGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGIGI GGCCATGAGA

GAGAGCITCA GGGGNCCING GNTIATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAC CTGATATAAT ATCTATAAAT TITGATTCCC TGGGGTATAA CAAGTAAATA ATTTTTAAAT GGTGCTTAGC

AAGATTGGTT CATGGNAAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA

CGAATGACAT GTCTCTTTT TTAAAAAAAAG TCTTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA

TATTTATCCA CACATAAATA TTTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG

AGTGTTTTCA CCCTCCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANIN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA

TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGIATTATTT TAGGCACCAG TAAGACAATC ATGGGAAAAA

AAGACAGACA ACCCCCGACC CTCCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT

CATCAGTGCT TGCTGCCCGT GTAAGACTGA GGITCCCAGG CCCGAGGACC AGNCTGGGCC AGGGTTCCC AGGGGTCINC

TC. LGGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACCTG GG

SEO ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTICAAA AAAAAAAAA AAGAGGAGIC ATAATAAATA TIINACTGIC TAGICAACCI AATTIATGAA GCCIGATTAT

CTAGCINAGC CICCGGAGAT TGCTACCGGA AATCICCCCA GATGITCCCC CITCTAACCI AACINICCAC TGINIGGCAG

GAAGGCAGCC GGCCATCTGC ATTCCGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGIN ACTCAACAGC

CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GITGGGTTCA CGGACCCATG AGCGACCCAG CITTCTTCCC CTCAGGTTGA

TATTGIGCTC CAAGCINGGG GATGCCCCGG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTINCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAATGGCT
GTTATGGAAA CCTACTTGAG GTTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTINCTACT TCAATAGCTC
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT
AAGTAGCTTG AGAAAATAAT CTATATAAAAT CTTTATATCC TACATATGGC TATAAAAAATA AATTTATAAT TTTAAAAAATT
GTTTTAAATA AACATTTATT TTTTACCCTA CCAAAGTAAA GGGTATACAG

SEO ID NO:913: (Length of Sequence = 313 Mucleotides)

GIATCIGGIT GCCACATCCA AGAAGAACGC GIGCNINICG CIGGICITIN CITICCICTA TAAGGIGGIG CAGGINITIT

CCGAGIACIT CAACGAGCIG GAGGAGGAGA GCATCCGGGA CAACTITNIT ATCATCIACG AGCIGCIGGA CGAGCTCATG

GACTICGGCI ACCCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG

GGCCCCGGGG CCACCAGCCA CCGINACCAA CGCGGIGTCC TGGNGGINCG AAGGCATCAA GTATCGGAAG AAT

SEO ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGOCC CIGCCACCAT GCCCGGCTAA TTTINAGTAG AGATGAGGIT TCACCATGIT GGCCAGGCIG GICTCAAACT CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC CACTGTTTTC ATAGTGAAGA AAGGACACCC AAATTTTGAT CIGGTTCAGC TATTCACTAT TCTATCCTGT GTGGTCTTAA GCAAGTTACA TAACTTGCCT ATATCTCAGT TTACTTAGCT ATAAATTAAA TTAAATTCGT CAAATGTTCT CTAAAGTCTT ACTAGTTACC AGTGTTCCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEO ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TITINATIAG ATGGAAGATA ACAAGCATTA CCNCATAGGT AAGTGGTAAG TACAGCCAAG CACAGAGGA GTGAGGGAAG TACAGCCAAG CACAGAGGA GTGAGGACAT TACTGGCTAT GGGAATGGGT ACTTATGAAA TCTAAGGGTT GGGTCTCCTG ATGAACTCTA ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT TGGCCAACAG TTCTTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTTCTTC AGNTGGTGCT CCTTCAACTT GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACITCAAG GIGCIGCAAG AGCTITCAAG AAGATGGGIG TIGACAAAAT CATTCCTGIA GAGAAATTAG TGAAAGGAAA
ATTCCAAGAT AATTTINAGI TIATTCAGIG GITTAAGAAA TINTTIGACG CAAACIATGA TGGAAAGGAT TACAACCCTC
TNCIGGCGCG GCAGGGCCAG GACGIAGCGC CACCTCCTAA CCCAGITCCA CAGAGGACGI CCCCCACAGG CCCAAAAAAAC
ATGCAGACCT CIGGCCGGCT GAGCAATGIG GCCCCCCCCT GCATTCTCCG GAAGANTCCT CCATCAGCCC GAAATGGCGG
CCATGAGACT TGATGCCCAA ATTCTTTGAA CTCAAACCAA CAGCT

SEO ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TIGAAAACTA TGTATTTTT TGTAAAAACC TGATCACATA GAGAATATCA GIGGCTATAC CCICTCTGGG
CATCAGTTTC CTCATCTGTA AAGTGGGGAT AATCACAGCC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAAC
ACATGGCAAG TCAATTAGGA CGGTGCCTGA CAGGCTGTCA GCGCCCAAGG TTGTGACTTT TGCTTTTCCT ATTGCTACTC
TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTTG CACAGAAGAG GTCCCAGACC
GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTTNAG CCAGGCTCTG CCACTCATAC GGTGTACAAT TTTCAAAGGG

SEO ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAAC TGCTTATATT
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCCTAC
TTACCAATAA TTCATAGCAT ACCTCCCCTT ATTTTAAAAAC TCATATGATA GCTGATTTCC TAACTGTAGC AATCAGGATT
CTTAGAAAGA TTCGAAACTG AATTTAGCTA ACTAAGGAAG CGGATTTCAT TAAAAATATT GGGTTAGTTT ACAGGAATCA
GTAGTGGAGG AACCAGGGTT GCATAAAA

SEO ID NO:919: (Length of Sequence = 345 Nucleotides)

GGEATGACTT TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAAG GAATGAGTGT TTCANACTTA GCTGACAAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT GGCAGAACAG AAGGCACCAC AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG ACTCTGCAGT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGGATA GAAGGAAGTC AGAGGAATTC ATGGGAAAAT GAAAT

SEO ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGIACT CAGGGAAGGG GCAGGAGAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG CATTCCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTTAATGA TGAAACTAAC TAAGGTACTG AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAAG AAGCCTCTGG GGTTAGTATT CCCAGTCTCC TTGTCTGCCC AGGACCCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEO ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT CTCTTTCAGA TGAAATTTTA TTTTTTTNCC AATAAGGCCA GCCCTACCCT GGAATCTGGA ACCANITCTG GCCCAGGGTA GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGTGTCC AGGNATGCCT TGGNCCTTAT TATTGACCTT CTCT

SEO ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGIT ACTGGCCTTG GCTGCGGCCA AGGGAAAACT CTGCAGGCCC TATTACTTGG CGGCCTTTAA CTCTTATAGA
ATTGGGAGAG AACACTGACA AAAGCCAGGA CATGATTTIN CGGTTACAAA TNATTTTCCT TGCTTGCTTT CTTCTCACCC
TTTTNAATTT TCCTTTTCIN CTTTTCCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCCTCCT TTCTTATTAT
AGCTGATCAT GGCAGTATTG TTTTTINCTG GGTAAAAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG
GGCCTTAG

SEO ID NO: 923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAAA CAACAG:CAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA
AACAAATGCT TGINAGCATT CCACATCACT GAAGGAAAAA AAGTAAGTTA TTATTTCCAA TGITGGGAGT TAGGTTGCTA
TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCCC
TTGCTCCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG
AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANT: TTT GATACAGGAA T

SEO ID NO:924: (Length of Sequence = Cicleotides)

AGENGOGGG TITCIGGAGC CGACTGAGGG ACTGGAGAAG
GCTACGGGG TCCTCGCCCT GCCAGGGCAA TCCTT. CTCTTNATCA TITGGTTATG CAAATCGCGG TAAAGTTTTT
CCGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTTCTTTATT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC
GGCCCTCTNG GCCCGCAGGC GTCCGGCCTC CCGAAGCACT GCCATGGCCC GGAATAGCAG CCCCNGAGCA AGG

SEO ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTIG CCATAGGACT GATGGATTAA CCAGTGTICG GCTTTATTIG AAGTCTATGC CCTGCACAGC
TCTTGTATGT ATTINAGATG CTAGAAGTTT TTINAGCATG TNATGTGTAA TTCTTGTTTG AATTCTAGGN ACCTTGTCCA
ACTTGGTTCT TTTTCAAGGT TGTTTTGGGT ATTCTGGGTC CCTTGCTTTT CCATATGNAT TTNAGGATCA GCTTGTCAAT
ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNITT GTATTGCATC TTTAGGANTG GTTTGTTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GITATICATA CCACAGCATT TAAAAAGCAA TCCGCAAGIN ATAAAAAAA AAAAAAAAA ATGATGIGAC ATATCCATTG CCIGANITGC CICTITIGIA AGCCAGINIT GGGATIATAG CAGAGGAGTA GCAGAAATAA NIATATICAG ACACAAACAT ATAGATATAA TAATATCCAA CCNCITIATA TGATITAGGG TCICGITAAA ATGGITACCA TTIGCITCIC CTAAAANITA TATAAAT SEO ID NO:927: (Length of Sequence = 286 Nucleotides)

GECIGICATG AGAATCACIT GAACCCGGGA GEOGGAGGIT GCAGTGAGCI GAGATCATGG CACTGCACCC TAGCCTAGGIT

GACACAGCAC AAAAAAAANC AATGITCCAC AAGTCAAAAA TIGINITCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA

AGGGTATGAA TGACTAAGIT CCTTCTATAA TATATTGACT ATAGGTTAGG AGATACACIT TCAGTTCCTG TTTTINGTAG

ATCTCCCCAAT GATCTGTCAT TTAAGAGTAC ACACGATGAG TGGAAA

SEO ID NO:928: (Length of Sequence = 349 Mucleotides)

CITGITIAC CAGIATTIAT TECACATEGI TITGITATCT ATTECATETG GIAAATIACC CCATACTITG CITCITAAAG

CATTAGACAT TICTGIAGGI TAAGAATICA GAAGCAGCIT AGCIGAGCAG TICTIGCICA AGGICIGICA TGAGGITGCA

GICAAGGAGC TGGCCAGGGC TGCAGICATC TGAAGGCCIG ATTGGGGCTG GAAGACTCCC TITTCCAGATG GCTCCCTCAC

AGGCTTGGCA TGTCAAAGCT GGATTGITGG CAGGGGACCT CCATTCITCC CCACATGGGC ATCTCCATAG GCTGTTTGAC

ATGGCAGATN GCTTCCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA

CCCCTACCCG GAAGGGTTCT AGCAGTGAGG ATTCCTCCAG TGACGAGGAA GAGGAGCAAA AAAAACCCAT GAAAAATAAA

CCAGGTCCCT ACAGTTCAGT CCCCCCGCCT TCTGCTCCCC CACCAAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC

TGTGGAGAAG CAGCCGCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA

ACCCCCAACT AAGGGCAGTA GTCTCTAAAG CAACCACTAA ACCACCTTCA GCAAAGAAG CAGCAGAGAG CTCTT

SEO ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAACICCT CITCGGACAA TATTGGCACT CCATTCAAAC CITGITTCAG GICAGICCGC ACTTCATCAT

CTCCCAATTT GICCAAAACA TACTGIAGCT CAAGIACAGT TITTAAACGT TICTGINCAG CITCITCTCT CATAAGCTGC

TCCCGACGTG CTGTCTTCTT NATTGITTTC TGAATATCTT GACTTAGTGC CATG

SEO ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGINITC ACAAACATGA TGCTTATCTA ATAAAATATC ACTGAGCAAT AAGGAGAAAT ATITTAAATA GATTTGAAGT

TGTGAACAAA TAAT.TAGAG TCCAAAGAGG ANAAAGANAA TTAACICTGT TTTTINATCCC TAGAACTCAG AAACTTTACT

GGATTGGTCA ACAAAGACAA ACTTTTTATT GTATAAAACA GTAGANITCA TGGAAGGGAT AATNCTTTTG GAACAGGCTT

CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTOGGG GCCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTINIGGG GATGGGATAT GGACAGGGAA

ATAGIGTTCC AACTCCATGC TGAGTGTTGT TITGAATTGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGTNTAC

GATGTCTCAC CCTTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCATT CAGGTAATAA

AGTCCCTGAG CTCCAAGTTG CTAGATCTAA GGAAGTATTT TTCCCTTCAT GTCAAAGATG GGG

SEO ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACTATTT CATTTATATA ATTIGCTACG TGITCTTIGC AACATAGIGA
AAAATAATCA TGICIGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTIG TATATITAGA GAGCCATGCT
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GITAAATTGT CAAGGAGAGT AGTGTTATAT GAATACTCAG
ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NITITAAAAA TAGCTTTGTC TAAAGATTAA
AAATTAAAGG TTCTAA

SEO ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGIAAGAAA ACTECTEAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAG
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACTTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACCAATGAAA TTNAGGTGCA ATAATACAAC
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEO ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCCTTCTN AACTTINATG AGCTGCCTNA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGGAAGGG
GAGCCCCTGG ATGCCCCCCA NACCCCCAACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA
CCTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGAACC CAGG

SEO ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGTTGCC AGATAAAGTA CAGAAGGCCC AGTTAAACTT GAAATGCATA TGANCAAGAA ATATATTINA GTATGANTAT GTCTCATGCA ATATTTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTTNCCAACA TTCAAATTGG AATGAGTGC CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA AATGTTTCAT TCTGCCTTCT GGATTNCTGT ATGAAGACTT TTGTTGTGAA AGATATGAAT AGAACC

SEO ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTITICA GAATTAAGAA GCCITGCCCI CITTGCGTGI CITCACAATT GINITAAGIC TATTATAGTA TICATTITAG
TITGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGI CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGITGACAT
GGGTCTGCCT CGCATGTATC TITTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC
TTGGTGGAAA GAAATCTGGA CATTTTTTCT ATGAAAAAAAA AGTTAGGTTA CATGGCATTA ATATTTTTGC TAGACTTAAC
CTACAGAAAA TGTTTCAAGC TTATAAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAAGC CTCACAAGAA ATAAGGIGCT TATGGIGITA AGITACAATG GAAAATAATC AATGGCATTT GTATGCATGC
TGCATGIGIG ATGIAGATCA GITCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGIGATCA TCAAAACCCA
GGCTGIGGAA AACTGTCAGT CAAGITTCIT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAAATCTAT AGATGAAGCA
ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAAAAAAAG ATTAAAAAGA TGACAGAGAA AGGGTTTAAA
AATTTGTAAG ACACGGCTGG ACGCGIGGGC TCACACCTGT AAATCCAGCA CTTT

SEO ID NO:940: (Length of Sequence = 385 Nucleotides)

GTAATCCCAG CTACTIGGGA GGCTGAGGCA TGAGAATITC TIGAACCCGG GAGGCGGAGG TIGCAGTGAG CAGAGATCAC
GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCTGI NICAAAAACA ACAAAATAAA TITCCTTITA ACATCTGINC
CAAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCCTCA TCACTCTITC CCTCCCCACT GCCCTCTCCA CGATGCCCAG
CTGATCAAAA GTCATTITTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTTG ANCATCAGAA
ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGI ATATAATACA GCTTC

SEO ID NO:941: (Length of Sequence = 406 Nucleotides)

GGIAACAGGI TITIACCAAC AATTECTIGI AGCIAATGIA GAACATACII GAGAAAATGG CITCIGIGAA AGACCAGIIA

GTACCAAAAT AATCIGGCCC AGAAAAATAG CCACCATICI TGACIACATI AATAGAAATA GAATAACCCC CAAAGGGAGA

TGAGAAGCAT TCIAAAAGIGC ACIGATCATG AGIITCTATG TGATGATTIG TGTCCATTIG GAGCICCAGI GCITTAAAGC

TGAAAATGAAT CCIGGCCIIT CACCACCCTC CCIGCCCATA GIATGGIATA TCCICITATI CCITCCCICI TAGCITACIG

AGAGTGIAAT TICCAACCAG TIAAGGCCAA AGAGGACTAT TITCIAGGAA AGGAGAGAG GATGAATTAG CAGITAAIGG

ACGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG

CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA

CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGAGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT

CTTCAATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEO ID NO;943: (Length of Sequence = 223 Nucleotides)

GIGCCATTAC AACTITINCIG TAACCCIGAA ATTGIGICAA AGIGAAAATT TITTAAATGA GATTATAAGA GCATAATCAA

ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTINCITCT CAGGIAAAGG ANTITTCCTT TINGTAGTCC AGAGCIATAC

ATGATTAAGA AANTGITCAG NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEO ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTTNNT CCTCCTGCCC ACCCCATCCA CTCTGAGCAT CAATGCAGCC GGCCAGTTGC

AGGCAACCAG GCAGCACCCT GGCTGCCCAG GCAGGCTAAG AGGCCCCCAC CCACTCCCCC CTCCTTTGCC AGTGGAAAAG

CTTGCCGTAG GCATAGCTTT CCCAGCCTTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA

CACTCAGGCG ATCCCTTGTG CAAATAACTG GAGGAGAGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA

GTTGGCT

SEO ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TOCAAACCTT TOCTCCTGAT TAAATGCCCT TAAAACTTAA ATCTCTTGTT

ATCTTCAGTT GTGATCTAGT CCCAAGTGGA AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG

GCTGCCTAGG CANTTTATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGGNCCC AG

SEO ID NO:946: (Length of Sequence = 286 Nucleotides)

GCICICICIA COCCCICATO TAGGIATGIN TATAGCICAT TIATTIAGG GIGATGITAA AAAATTGAAT GCCCTIAATG

GCAAGGGAAC CAACCAATCA ATGIGGATGC CACAACITIT TCCCCIGITG ACTGITGINA TIGGIATGGA AGIATTITIT

TITITCICCCA GCITITATIT CAGGITCAAG GGATACATAT GCAGGITTGI NACATGGGIA AATTGCATAT TGIAGGGGIT

TAGIATACAG GITATTICAT CACCCAGGNA ATAAGCGIAG TACCTG

SEO ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGIGCAT TINCICCCCC TTIGAAAGAT TIATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANIG
GGGAGATGIT GITAAGCAAT CIGGATTICT TCCAGAAAGC ATGTATGANC GTATICTCAC TGGICCCGIT GIGAGAGAGG
AAGTAAGCAG GCGGGGAGA CGGCCTAAAA GIGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCAGT
GITTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACIT CCAGGGNGIG GGNICTCACA AACTINITIC AGGGCCTTAC
AACAAAAACC TACAA

SEO ID NO: 948: (Length of Sequence = 216 Nucleotides)

GEATGIAAGC TCCCAGACAG ACATCICGGG AAGCITCGGC ATCAACAGCA ACANTCAGIT GGCAGAGAAG GTCAGAITGC NCCITCNATA TGAAGAGGCT AAGAGAAGGI TCGCCAACCI GAAGATCCAG CIGGCCAAGC TTGACAGINA GGCCIGGCCI GGGGIGCTGG ACTCANAGAG GGACCGGNIG ATCCITATCA ACGAGAAGGA GGAGCT

SEO ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT
CTAAGTGACC TTCTTGCCCCA ATGTTTAATG CACAATGGAC OGTGCCCAGG GAGACCTGGG CATINICTGT TGCTTTGTTC
TACAATGATC CCTTCTGTTC TAGCAGCGTG ANTCACTGAT GGTCATACTC TCTGAGGACT GTACGCATTT TCACCCTATA
TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTTA TTTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA
ATAACCATIN GTCACTCTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEO ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGIGAAA TAGAAGTCCA ATTACCIGGG GAAACTTCAT CTTAACCCIC TGGAATTINC AGICTAACCT AAATATTGAT ACTACACCIG CAGCAGCATT TAGITTAGCA TGIAGIGAAA AAGIAAGICT AAAAAAATATT TNCATAATCT TTGGITCCTA AAAATTGITTT AAAAGAGATG CAGTGACATA TGICTGGAGT TTGCTTATGG CCAATAGGIT AATGCITCTA GCTTCTATGC TTATTGCAAA TTTTAATTAT GIGAATATGC AATTITCACT TATATTTG

SEO ID NO:951: (Length of Sequence = 302 Nucleotides)

TGICACGATG TTACAAGAAC GATTCCGGGA GITINCCCGA NACACCGGGA ACATTGGGCA GGAGCGCGTG GACACGGTCA ATCACCTGGC AGATGAGCTC ATCAACTCTG GACATTCAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA GCCTGGGCCG ACCTCCTGGA GCCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTTACCA CGATGCCAAG GAGATCTTTG GGCGTATACA GGNCAAACAC AAGAAACTNC CTTGAGGAGC TT

SEO ID NO:952: (Length of Sequence = 302 Nucleotides)

TITITITINI CCACITCACA GITGATGCCA ACCCAGCCTG CATCACAGAG ACACITATAT CCACTGAGAC CICCAGTACA
GITTCCATGG ATGCAGGGAT TGCNCAGGCA TTCGITCACC TGINAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA
TACAGCCGAA ACCATTCACA CCGTTGATAC ATGINGCACC CITGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG
TTACATCTCT GGCCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEO ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAATNAAC TITGITIGAA AAGITAGTAT GGGITAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT
TCATGGCATT CTCTTTAAT ATGGGCTTIN CTGTGTTAGT TAACATCTGA TAATATGACC CCCCAATCTA TTAATATTTA
TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGGTA TGTATTGAAG TGGAATGAAT AAATGCAAAA AATGTAGTAC

TTATAACATT TIGAAGAAAA TCITI'AAAAA TNITIGIITTA CACAGAAAAT AATCTI'AGAA A

SEO ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTIAAA AATAGTGAAG TCTTTATAAG TAATTITTAA AAATTIAAAC TAGGACCATA AATTICTAAA CTATGAGATA
AATGANCAAG AAAACAAACA GGIGITTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACTGTA TTTTTAATGA
GANTTAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEO ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTIGATAG AATITICIAG TGAAACCAIC CIGACIIGGG GITTIATITI GGAGGAATIT TAAGITATIA ATICCGICIC CITAATAGIG ATAGGACIAT TCAGATTACC TIATTICATA TITGGIGAGT TITGGIAGCI TGIGITICIC AAGGAAGIGA TCCATTICAT CITAAGIIGCC AAATITATGI GIGIATAATA ATITGIAGIA TICCNGIATI ATCCNITIGA TGICTGIAGG GICTCTAGIG ATATCCTATG

SEO ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCIATIAAA TCATIAAGCA TIGCAIGCAA TACITTINCI GIGAAAATTA TIAACITCCI GGIATATAAA ATTATITCIA GITATGITTA AATATITCCN CIGGGATATT ATCATCITAG ATCIGTAAAG TGGIACIAAA AITAGITAAAA ATTATITNIA AGATATACAC AAACAGAAAA ATATAAAANC AAAIGTATCT TATACATAGT ACTIGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GIGIGGAGCC TAGAACAGAC ACCAGTCAGA AGIGCAGATA AGGICTGACT TICCAGCATA GCCAGGGGAC TIGGCTGACT CCACATGTCC CCAGGCCTTA CCTAGCTGTA AAGCAGGCAG GITGIGAAGT CATAGTGGCA GITTATGAAA TATTTAGGGG ACCTAATAAT CITTAAATTG TATAACATTT CITGCATAAA TITCCTTTCA TGAATCCTTT CATGACTTAG ACCATCTATG ACCATCTAG ACCATCTAGA CTIGTCCTAAC CACCCCTCTC TITAAACAAC CAGTCTTTT ACTTTAGGAC AAGAATTTAC CATACAAGAT TCTTTTGTAT AAA

SEO ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTIGATAGC AGATTGITAG AGATTAATTA CCIATCATAT GCCAAAGCCA CITCCIACAT GTCAGTGCIA
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGIA ATTAATATAA TAGGTTAATT CATTGIAATT
ATTTITÄAGC CITTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGICAC AGAGAACACT TGATGAGAAT
GINCTAGTAA TAAACCTTAA CCCTCTGGGG AAAAAATCCT ACTGICTTC CITCTGGCTT CGTTTCTTCT GGAACATATT
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCCC AGATGGACTG
TGCTCATTGG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGGC ATTTGGGGAA TTTNAGAGAA AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCATCTAGG GTATAAAACA GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEO ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTIC TGITGITTIA AGCCACCTAG TTGIGGICAC TTGITATGGC AGCCTTTGGA AACCAACACA CCCGCACATG GCGIGITTIAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNTGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG GGAAGACAGE GAAGGACCAG AGTIGIAGGI AAAGCAAAAA GCCACAGGIC ATTAGGAAGI GATGCTCCAA CTGGGCATGG AAAAGGAGIT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGAVICC AGATCTCTCC TAGGGGGAAG NAGGGGCAAC TTAGGACAGI TTTTGTGTCT GTGGG

SEO ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTITCTTCC TITGCCACAT CAGTGGGTGA

GGACCAATCT MTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA

GCATCCCTTC CTCCCGTACT GAAGCTACGC AGGGCTTGGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCCTCA

CTGGAAGAAG ACAAGGGCTT CAAATCACCA CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT

CATAGGG

SEO ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAAACACC CGAGGCCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG

AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGGAGCAGC AGGCGACGCG

GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATIN GAGATCTCCG ACTCGGCTCC

CCCAGCGCCCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCA: TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTINAAG TAAACCCATT TTCAGGATGA CTACAATCCT

TCCACTTCTA GAAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCCTTTC

CACTACCCAA GCCCGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCCATCT GGGTTCAGAG GCAATATGAG GAGGTTGGGG

GGATGGCAGG GGCATCCTCA GGGTTGGGGG GCAGGCCAAG GGGATGAGAT GGCAAAGGAC AGCTTTNGGA ATCAGATAGA

CGATCCAGGG TGCCTTCCTA CACTTGCAT

SEO ID NO: 965: (Length of Sequence = 361 Nucleotides)

ACCACCAACC CAGACGTGAC TGTCAGGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANITGATG

CTGCATGCTG CTGATGTTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA

AGAAACAACA CAGAAAGCAG AATCACAGTT GTTGGAGTGT AAAGCATCTT GCGAGGAAAG AGAGAGAATG TTAAAGCGATG

AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGGAA ACAAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT

GACAAGGTCG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEO ID NO:966: (Length of Sequence = 163 Nucleotides)

WO 93/16178 PCT/US93/01294

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CTGCCTTCTG GGTTCAAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCCAGT
TAATTTTTGT ATTTINAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GRGTCAGIAA TATGITGIAC ATATTATINC ATCACCCAGG TGITAAGCCC AGINCCCAAT AGITACCITT NCIGCTCCTC

TCCCTCCTCT CACCCCCCG CITCAAGICI ACCCCNGIGI TITCITCITT GIGITCCIAA GINCITATCA TITAGCTCCC

ACTIGIAAGI GAGAACAIGC AGIATITGGI TITCIGITCC TITGITAGIT TACIAAGGAT AATAGCCICC AGCICCATCC

ATGITCCCAC AAAAGICAIG ATCICATICI TITTITAIGGC TGCATAGIAT TCTGIGGIGI ATATGIACCA CATTITCITT

ATCCAATCIG TCATIGATGG GGCATTIAGG GITGATICCC TGTCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GIGIATAGIA ATTIAATAGI AATTAAATGI AGAGIATIIG TAAAAACAAG GAGAGGAAAA AGAACAATIC ATATITGAGA
ACICCIAATA ATCITCIAGA GCAGAGIICA AAGAAGCAGI GGIAAAAATA AAGCCAAAGA GATATAGGG CIAGICITAG

ACACTAATTT GCTGCTTTCT

AACCAGGACT TCCTATAGAA CCAGCTTCCT ATAGAATCTG AACTTTATCT GAAACTCTTT CACAGATCTC CTCCACCTTA
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAATT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG

GTTTGCAGAT ATOCAACAAA TOCTACCCAA ATCACTTTTC CAGCTGCAGA CTTGGAATTT CAGATCCAGG

SEO ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTIGAA GAGACGGGTC AGGAACTAGC GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGIN

CTCATCITTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGACTGAACC TGCATACCAT

CCGCGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA

AAAATGTCAA TGCAAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCAGGA GCCGAATTCG GGCCTTAAAA

SEO ID NO: 970: (Length of Sequence = 372 Nucleotides)

TITIAAGATG GGATCTCACG GITACCCAGG CIGGAGIGCA GIAGIGCGIC ATAGCTCACT GIGGCCTCAA ACICCIGAAC

TCAAACIATC CICCIGCCIC AGCCTCCCAA ATAGCIGGGA CIGCAGGCAC ATGCCACCAT GCCIGGCTAA TITITIAATT

ATITIGIAGA GAIGGGGICT CACITIGITG CACAGGCIGT TIGCTTGATT CITAAGAACG TATAGGGATC CAGCIGIACA

GAGCITICIG CAGICITTIG TAATAGAATT AGTIGITAAA ATIGIACITA TIACATGAGG CATCAAAGAC CITGGAATAA

AGCITATINCC TCACATATCT GGGCCATTAT TITIGGACTTA CTATGGITAC CG

SEO ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TITTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA

TGAGATTCTN CTTTCACGTC AACAATTGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA

TAACCCAAAAC AAATTTGAAT CCAAAAAGGTA GATGTTGAGA GTCTTGTTGG TTCTGCAGCT CAGGCCTGTG AAGTTTGTGC

TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGTNCTCCT CAATGTGAGG GAACGGGAGC TINGGGGCAT CAACCTCACA

TTTTCTTCTC AAGGGGA

SEO ID NO:972: (Length of Sequence = 396 Mucleotides)
TTCCTTTACA TCAAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT
GGAAACTAAT TTMCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATACACAGC

TECAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGA GTGTGAAGTG CTTCTCAGCT GEGCTCAAGA CCACTTCTTT CCAGTGCTGG AAAGAGGGGC TGCATGCAGT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GEGTGTTCTC GAAAGGGCAG CCCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTTGG GGGAGCTCCA AACAAGTGCA GAGAAGCTGC CTATTT

SE ID NO:973: (Length of Sequence = 401 Nucleotides)

SEO ID NO:974: (Length of Sequence = 37. Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT
CTGGGGGACA AGATTTCCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG
GTGCTGCGGG AGTGTGGCGC CACATTCTTT ATAGCCACAG GCTTTCGTGG GACTINCCCT GGGGTCCTTC CCTATTTGGC
TGGGTGGACC ATAAGCGGCA AGTGAATGTG GCAAACTTCA ATTCACAATT AA

SEO ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTIGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTTAAATAAT ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCTAAAAAC ACAACATCAG ACATAACATC ACACATTGT TCCAAAGGAC TAAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAAGGACA GTCCCCATCT TTCCAAAGGAG TGTTTTTTAAA GAAGCACTAA CTCTGGTAGG TTATCAAACT ATTTTTTTAT TCTAAATAAA TAAAAGACTA ACTGAAGGTC TCAGGGGCAC CTTATTTTT

SEO ID NO: 975: (Length of Sequence = 343 Nucleotides)

CIGITCCCTA AATATTATTA AAATTITAAA AATTAGACAT TIGGICTAAA TIAGACAGGI AAGATACTAC TGTCCTTACT
AGATGCTTTA AAGTCATAAA CIGCITCIAT GGCTTTINAT AATTGINCAA CTTGCTTGCT TIAGAGCCAT TGGATTCTAG
GTAAGGCCTA GAGACATTIG GAGTIAGCCA TGTCCCCTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTTCTGTCC
TGTATCCTAC ACTCTACACC TGATACATAA TIAAAATTAC TIACACTAAA AATAAAAATG GATGCATTT TTAGGTAGGA
AGGGTATGGG AAATTATAGG TIT

SEO ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTITGIAA TATCAGIGCC TAGACTAAGC CIGGCGIATA ATAGGCACIC AGAGATIIGA AGAATAAATG ACTAAATGAC TGIATCAAAT ACTIGCCCAT TGIITGCTGT TICIGANIIG TACAAGGCCA TCATGATAAT TGATGATCIT AATAATGIGA GAATAATGAT CINITACCIT AGIAAGAGAG CCATCAGIIT ATIGGATGAT AGITATATGG AAAAAGAAGA AATGCTACIG TGATAAATAT TITATAATTIT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCCCTGGCCG AGGTGGCCAA GATGGCACCT GTTTCCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC
TTINAGGTTG TNTGGGGTGT GGTCAGTGCC CTCCTGCCTG AGGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

- SEO ID NO:979: (Length of Sequence = 316 Nucleotides)
- * GIECGINCAC ACTOTOCTOC TECTOCOCAA ACTOCTCATO ATTEAAGOOG AAGTGGTCAA TGAAGGCAGA GGTCATGOGO
 TGCATCTGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAACTCC TTGAGCCGGT CGTCCTCATO
 GTCACTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTTGGT CTCCGCCAGG GGCCCCGATA
 CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTCAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEO ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNICAGIAAA GATTAGAAAT GGATTATTTA CCTTGTTATA CAAATACACC
TCCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTTAA CGCCTGANIC AATCCCATTA TCTGCATTTC
TGTGTGGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEO ID NO:981: (Length of Sequence = 322 Nucleotides)

GITTATTAAT ATTTAAACAT ATTAAAATAA TACATGINCA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG CAGIATTCCC CITCCAGITC CACTCTIGAA ATAACCAGIT AACAAGATGA TGAACATCIT TCCATGATGI TCTCCAAGAT TCATATTATT TTTGCAATCA TACAATGGCA TATACAGCTC AGGIGCGGTG GCTCACGCAA GIAAATCCCA GCATTTTGGG AGGCTGAGGC GGGTGGTTCA CCTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCCTGT CTCTTACTAA AA

· SEO ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAGCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGINITICC
AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGG GCCATCCAGA
GAGGTTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAAACTT TGGGGAAGAC AAGACACGGG AGAAG

SEO ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCITGIT TRGITITIAA AAGCRGROGI GITACTGCTI AAAGRCROCA AACTGITATI GAGAACACIG ACCAGAGCCC
TGICCATAGA CCAGTGITTI TCCAAGTGCA GATTGCAACT CCTTTGCAGA GIAGGITGIG GAGCCATTIN AGCTGACTAC
TCACCAGCIT TCTTCAAAAT GIAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG
GIAAATATTG TNGIGICAGA CITTITTGGG TGAGGIGGCA TGIGITCACA TACTGGNTCA CATTATAACA TGTATTGCTC
ÄTTATGGGTT GIGGTCAGAA AAAATTCAGN AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GIGGIATGAG GIATCAATGA AATACATTIA AGAIGIACAT TGGITTGTIT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC
TICCAGGCIA TAGGIAAATT TATACATTIC CIGGITAAGA TIGGITGAGI TIGICIAAGG ACCIGGGATC AACAGAGAGG
AAATGITTGG NITAAGACAA GGATTGIGGA GACCAAAGIT TIACTACGCA GAGGAAGCTC TIAGCIAGCA GGCATAAGAC
AGAAGAGGCCI GIAAAATGIT TICTTATGAG ACIGAAAAGG GIGCCIGACT CITAATIGAT TATCTCCIGG NICIGGAAAG

AAAAAAAAA GGGAATGCCC AGGIGCGGIG GCTCAGGACG GGICTGGIGG CTCACACCIG TAATCTTTCT TAAAACGITA
TGAAGITC

SEO ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGIATACTI TIGINITITI TICTACTIGI TAGITGTATI AGTATCAAAT GGCATAATAA AGTTACTITG TITGCCATITI CCCACTCATC TGAAAATCAC AAAAAGCATI TATTITCTAAG ATTIATATCC ACTGACCTITI TCCCCAAAGI TATTITCCIG TTACTIGIAT TICATCTITIG CCCTITATTIC TITAATATITI GIATTAGAAT TAGCTTGCIC TIGITTCCIT CACGGCAAAT GIGITACATT GCCCACTGGG TGGCTTCTGC GGATGCCCCT ACCCACCCCT CGICTGGAGC AGAGAAGTCC TGTTAGCCTA GCCAGCATAGI GGCTGCTGIC AGGCGAGGA GTTGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCCTGCG

SEO ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGAI CCAGCTTG GAGCGCAAGT CCTCCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCCTCTN AGGTCCTCTC
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG
CTGATCGGAA GCCCTTAI CGCAGAAGA CAGACCTGGT GAGCCA

SEO ID NO:987: (LE ST Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTC STGGATAA ACAAAC TG GTACATCTAC ACAATGGAAT TTGGGA GATGAAACAG

AATGINTGAG GGCCCAC CATGITAT GGTC TG GTCTGCCTCC CF NTCCA CAGGCA GF TGTGCCT

GGGTGAGGGG CTGGGAGC CACCAGGAG CATCA ACAAGGAGA CCAAAGAAAC ACTCAGGACA CACGACAT CTGCAGGGAA

CCTGGGGGGT GGTGAGGAAA GTCGTGCACG GGTGGTTGGG GGGAGACTTG GAGGCCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTTAG TTTAAAAAGTT

GTAGGTGATT AAAATAATTT GAAGGCGATC TITTAAAAAAG AGATTAANCC GAAGTGANIT AAAAGACCTT GAAATCCATG

ACGCAGGGAG AATTGCGTCA TTTAAAAGCCT AGTTAACGCA TTTNCTAAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG

TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAAACTG GAAGACAGAA GTACGGANG GCCTCCTTCA

TGTTTACAAT TITTAATTAAT TITTTTTTATT TTAGGRGTAA TTTCTTACCA AACATTACCC A

SEO ID NO:989: (Length of Sequence = 432 Nucleotides)

GICTIGGCO CIGCACCI CIGCCICCIG GGITCAAGCG ATTCCCCIGC CITAC CC CAAGTAGCIA AGAC 3

CATGCGCO CIGCACCI TAATATATAT ATATATITIT NGIAGITITA GTAGALACGG GGITCAACA CGIA 3

GCIGGICTG AACTCCAGAC CICAAATGAT CIGCCCGCCI TGGCITCCCA AAGIGCIGGG ATTACAGGCA TIAGCCACIG

TGCCIGGCCA ACAATATATA TIAAATAAGC ACACATACAA CAAAAGIAGG TGITGGTAAG CITACAAAAA TGIGACCAGT

AGCITGCTGA AACCTAACIT TITATITGIT CATGGAACIT TCTAGACCGI AACTACACIG AATAATGAGA ATCTGCTGTA

ATCTITTITA GGIGCIGTAG ATGAGCCATT GG

SEO ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTNCTTC TCATTAGCAG TTTCAGTCCA CAGCTGGGGT ATTAAATTTG TNAGTCATTG AAATTAATCC

CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATTCTGG TGATTTTGAA

AACATGAATG ATACCATTIT GCAGCAGCAT TGIAGATTIG TAGIATITTA GATTGGIATC ACAGTGCACC TGAAAAGIAA
GITTCATTIT ACTITITINA TIGITGITGA GACGGAGCTC ACTITIGICA CCCAGGCTGG AGIGCAGTGG TGIGATCTTG
GCCACGAGC GCCCTGGCT CGCCTGGGTTC AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC
GCCACCATGC CCAGCTAATT T

SEO ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGCCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG CCGGCTAGAA CAGCGTTCCT AAGAATCCGC GCCACAGCAG GTCCCGCGAT GTTGGGGCCT TAGTGTCATC GAGCTAGCCC CAATCCTCAA CCCGATCTTC AACTTCTGGT AGTCCTAACA GAAGTCTCGT ATTGAACCAG CCACTNTGGC CAGGGAGAAG TAATCCTCTG ATAGTTGAGG TTCTTTNCTC TCCTCTGGAG CAGATAGTGG TGTCTCCTCC CCACAAAGCT CATGTTCTGC TGGAAGAAAT GGAGATGGCG CCCTGGAAGG C

SEO ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCACTTGG CTCAGAAATG CTAGTCTTTA TTTNCTGAAA TGTTTTATAT AGAAAAAAATT
TAATAATAAA TAGACATTCT TATATATTTC CTTACCATTT NAGATTGGGT TAAAAAAGTAT GGNGACTTCC GGCCGGGTGC
GGTGATTCAA GCCTGCAATC CCAGCACTTT GGGAGGCCGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG
TGAAACCCCG TCTCTATTAA AANTACAAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG
CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGTT AATTTCGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC
CGTGTG

SEO ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGEAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGCGGG AGTTTGCCAA GGAAATTGAC ATCTCCTGTG TCAAAATTGA
GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCAGT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNTGG
CCATCAAGAC GCTCAAGTCG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTCG
ACCATCCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GTNATGATCA TCACCGAGTT CATTGAGAAT
GGCTNCCTGG GACTCCCTTT CTTCCGGCAA AACGATGGGC AGTTTCACAG TTCATCCACC T

SEO ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCTTCCAG TICCGAAGGA TAAAATCAAA TICCCACTIT CIGGGGIGGA TGCCCAAAAC CITCACAACI CAAGIGITCT CCAAGIGCAA AIGICAAAAAT GGGAGGAGGA AAGGGITTAA AAATTAGAGA AAACIGTATG CACTTACGGA CITAAAAAATC CGAAAAAAACA AGGACATTATG CICTGAAATC ACAACCAAAG CCAAAATAAA AGGGACATTT TICACCTAAA CIACCIAGAG GGATTITITIG TITAGITTIT CCITTITCTT TITTITTITCA TITTCCAGIT AAGICCIATG TCTITINGIGA AATTCCAATA CITAAACIGC AAGICIGCAA TCGICTCTGA AGTCAGIGAA ATTA

SEO ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTITAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CIAAAGTATA GAATAATAGC
AAACAGAAGG AGCACCCTAC CCCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC
GAGCTGGAGA AAGAAGTTGC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT
GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA
GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

270

SEO ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTACTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC
ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA
ACACTAAATA AGTCCTCCCA GGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA
GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT
GGAGTCACCG TCGTCCGGTA CGNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCCGCANAGC AGCCCTCTCT TCAATAAACC
CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCACTCT TTCACATCAG
GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC
CTCCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTTGTNTT GGACTGACCA CAGGCACTCA
CG

SEO ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGGACTAT GATTETINAAG ACTCACAACC ATGTGGAGAG GCCGAATCAC GCAGGAGAGC CACGCATTGG AGTACCCTGG CTCCCAGCCC CTTCCCCACC CCGINTTGAG CCAGAGAGCT ACAAGCAGGA ATCCCAGTGC AGCTGCAAAT NATGGCCATC GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEO ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGITT TGGAGCICGA NATCTICATG GGITAGACIT GCIGGICAGA CCCAGGAGCA CCIGTGGCTC ACACCTICTG
TNCCCCICCI GGCCIGIGCA GAATGIAAAC AGCAGACICA TACICAATGG GCACTACAGG CCITATCAGA CGITTIATAC
AAGCCIGGAT TGCITAGIAG GGGAATAAGG CATTCICTGA GGGGCTITC CACTIAGATT GAGAATTITA TITGAAAAGA
ATCIGGITTA AATGGCATIC TGGICCGAGG TAGCTGCTCT CCCCACTGAG AGCTGAGCCG AAATATAAGA ATAATATATT
T

SEO ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TITICCOGTCT TINATCTICCC AGTGACCTGA ACCACGCAGA TITITTCAAGC AGGAGGGCCG ATTGGGCAAC CACAGCTCCC GTGCTCTCC TITICCAGTGC GCGGCTTTCC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC TGCTCGTCCA GCGTGCTGGC CGCCGTGGTC TTCGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCCGN TGGCGGTGAG ACGTGCGGCC GGG

SEO ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGGATGTC ACTGTTGGAA AGTGCTCACA ATTTCTCATC TAAGCCGAAG TTGTCTGTNC TCCTTCCTAC
CTTAACAGTT TCTCACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA
CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCITCCT GAGGGAAAGT GGTAGAGTTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACTCAG AATTTTAAAA AAAGTTTACA TTTTGTCATT TGTACTTCAG ATGAATTTNC TTATTAAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT CCTGTTTCCC AATGCCTACC CTCCTTCTC TCCTTTCCTC TTTCTCTTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC CAGAGGCAAC TGGCATTATA AT

- SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)
- GGAAAGAGA GCAGGICIGG AGGITIGIGG AACCCAGGICC CCTGCAGAAT CIGIAAAACC TAATAAATCA TGGITGIGGC CATTCTCACG GTGGTGATIG TAATTAGACG ACCCCAGGA AGCCCAGACA CICGGGGCCT GGAGITCCTC CCCCTGCCTG
- ACCTAGAAGC AGAACCGITT TCAGCGNTCT GCCCTGITGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC

GGGTTTTATT TCTCTCTTTC TTGAGTG

SEO ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCICCIAAA CACTITCITC CIGAGATGIT AAGCAAAGIA ATCATCCIGI CACTAGATAG AAGCGATGAA GATAAAGAAA AAGCAAGINC TITGATCAGI TIACTCAAAC AGGAAGGGAT AGCCACAAGI GACAACITCA TGCAGGCITT CCTGAATGIN TITGGACCAGI GICCCAAACI GGAGGITGAC ATCCCITTGG TGAAATCCIA TITNGCACAG TITGCAGCIC GTGCCATCAT TTCAGAGCIN GGTGAGCAT TCAGAACIAG CTCAACC

SEO ID NO:1005: (Length of Sequence = 271 Nucleotides).

GITAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCCAAGGC TATGATCTIT GINCTGCGCC
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG
AGTAAGCCTG CCCTGGGAAA TNCCAGCTCA AGGGACTGAC AGGCATAATG CTCTTTGGGA GAGAAATGCC ACATCTGCAG
CGACACGNAT CCTTAACACT GTCCCAGGAC T

SEO ID NO: 1006: (Length of Sequence = 336 Nucleotides)

TATITINCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGITTATAGI AGGIGITGIT
TTAGIGITGA TCCCTTTTIG CICCAATAAT CAAAGIGATA AATATTGAAA ATTGATTCAT GCAGCATTAC TTACICCATT
CTAATTTINA TATATGTCAA AAGIGCCATC TCCCAAACIG TGCIATCCCC TTCAGGAGAA GAGACICIGC TGAAGITTAT
AAGGITGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GIGIATACIG GAATTCTTAA TGCAAATAAC AACICTTTIG
GGAAGTAACC CCGTTT

SEO ID NO:1007: (Length of Sequence = 355 Nucleotides)

GCCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT
GCCCTCGGCC TTGGGATGCT TATCACAGTC CTTTGGGACC AGAACACTGG ATATCAGINC AGCCTCTGGG CCAGCTTCAG
AGGCTGTTAG AGCATCATTG CTGCTGTGGC TGATGCTTCC TTTCCTCAGT AAATCACAAA AGTCGTGTTG GCCATCCAGG
TTACCGAGTG ACTTAATTTC CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTTGCCA TTTTTGTATC
CTCGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

SEO ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTAAAG AGAGCTTTGG TCAGIAAAAG TATAAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA
TCAAAACATT CATTTCATAT TGAATGIATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGITTGAGT ATGTCTGCCT
TGTGGNTCTT TAAAACCTTT CCAGCCTGGG TTATTTTCCC AAGCTTTCTT TATAATTACA CCAGGGAAAG AGTTACCNGG
NATTAATCAA AACCAGACAG TGGACAATG

SEO ID NO:1009: (Length of Sequence = 295 Nucleotides)

GATAGCAGCA ACATACGITT GITTATTCAT TIGCTTACTT ACAACAACG TITATTCATT AITTATAATG CAACAAGCAT
TAACCTAGGI GCTAAGGAGA GAAAAATGAG TAAGACACAG TITCTITCCT CAAGGAAATC ACAGTCIGIT GGCAGAGATA
AGIAGTAATG GIGCCTAATA TAGGTAACAC TIGCTACCTG CICCAAGAAC AAAGITAAGC AAGIGATTAA GITAAGCAAT
GCTTAGAGGI AGAGGATGIA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO: 1010: (Length of Sequence = 356 Nucleotides)

GIATTICCTC ATTIGIGCAA ATMAATAGA AAAGGTAAAT NAGAAACTCA AGAGGTTIGT TACCTACTGT CAATGGAGTG
GGGAAAATGG GIGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGINGAC ACTICTGAGT ATACCTTGTG
GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAACT CCCCAAACTG AAAAGGATAG ACCACTGGAA
CAACTTCAAG TGGTCTAATG TAGAAGCAAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTTG
AAGAGTTAAC AGGGAAACAC TTTCCAAACT TAAAGG

SEO ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCCAGCT GGAGACAGTC AGGAAGGACT GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC ACAGTTCAAA GTCTACCCTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCCT GCNAGCTCCC TGTTGGCCTC TNCTGCCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEO ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCIA TAGCCCIAGI CAACCACTAA TCTATACCCI GINCICIATA GATTIGCCIA GICTAGAAAT TITGTATAAA TGAAATGCAI GCACTIGAAC TITTIGTATC TGGCTTGCIT TICCATTIAG CATAAAGIIT TAAAGGICCN CATATGTIGC TGCATGIGIG CATTICITIT TGIGNACTGC NATATTACAT TGIATGGGAT ATACCATTIT GCCATATTIN GITAAATCCA TTCATCCAGI TGGTGGGACA GCAGGTTATT TC

SEO ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGITAGIG TITTCIACAC TACACTCAAG TTCATTCAGC ATGICATITC AACAACATGI GACGIGTCAA CITCAAAAAT TAAACAAACC AGCNAAACAC AACACTTGNC ACTACAAAGG AACTTGITTT ATTCICAACC TTCTATGATA GCTAAACTTC TCTGNAATTT NGITCCCCCA CACATCCCAC ATCIGGGCIC AATTICCAGC TTCIGITNIT CIGITTTATT TCATCCAAAA TGTTATTTTA AT

SEO ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGCAGA TTTCAGGCCC AGCAGGTCCT GGNCAAGTGC CATTCCACCC
GGAACTTTTA ACCCAAGCGG TGGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTTCTGGG CCATGACACT
TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCCACG

SEO ID NO:1015: (Length of Sequence = 222 Nucleotides)

GENARGAAG GIITCTCAGA GGACAGCCIT ATTAATTICT CAGAGGATGA ATTICNACAA TGGCAGCACG TTGCAGTCAC AACITCTTAA GGTGCTTCAG AGGCTGATTG TTCCTAGNAA CACAGAGTAA TGAACTATTC CTGAAGAGCA ATGAAACAGG TTTTGAATTT TNTTGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEO ID NO:1016: (Length of Sequence = 236 Nucleotides)

GAATAAACTG GITTGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGI ACATAGACAC AGGACAATTA ATCAATTITGG GAAAAAAAAA AGNACITACT TICTCCATTG CIGCCIGAAT IGTITCCCAA TCTGCCTTGA AATGCCACTT TIGGCCAATA TITTINCAAA AATTGACCA AAAAAGAAAA AGCACINAAT TTCCCTTTTT ATACAAAAAT GNITAAGTAG GCAAGT

SEO ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTTGGAC CTATGTGGAC AAAAAAAAA ATCTAGTCCA AGCTTTCACT ACCTTCTTT

TTTATTCGCC TTCTGCTTCT GNGTTCCACA TGGGAACTTG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA

ATGAATTTCC TGATTTTTAA AAAAGCCCTC AGGAACGCA TATGTATANG GTATGTATAT GAAAAAANGT GTTNAGGAAT

GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTIT ATGAATCAGC TAAAAAAATA TGATGACGAC ATTTCCCCAT CCGAGGACAA

AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC

AGCACAGCAG TGCAGCCGG GCTNCCCAGC AGGGCGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG

ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCCINTNCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC

AGGACACGAC CCACCCGGAC GTGGCCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TIGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG

TAACAGCAGA GCAGAGAGTG CAGAAGTGGA CGCTCAGAAG CGAGTTTATG TGTGTYTTY CCTCTATCTG CTGGCTGTGG

CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTCAGATCT GGCAAACTCT CTCTGCACAT

AAAACTGTTA TTCTTAGTTC TCTGAAAGAC CCCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTTACTAC

ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEO ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC

TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCAGT GTGAATTAAA TTTNCTTTAT

ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTTNCT TTGTCAGCTA TGGACATGGA ACAGCCGGAC TATGATTCTA

GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTCC TTTCCAGATT TAATTTCTAC

TTAGTACTAA AATCTGCTCT TTTTTTGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC

TGC

SEO ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGT TGGGGTTTGC TGGGGGCCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGGGGA
GCTCAGCACA TTCCATGGCC TAGAGGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT
KTGGGGAGAT CCCAGGGTGG TCTGGGGGCCT GGAACCGCCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT
GCGTKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCCAGAT GATATCAACG GCTTCCTGAA
GAGAGACCCG GGCAATAACA TCCATTCANT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCCAGTTA TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA AATTTGCTAA CAGAAGAGAT CTTAAGTGTT CTCATAACAC ACAAAACATA GCAACTGTAT GAGGTGATG GTATATTAAT TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA TTTTTGGGGA GCT

SEO ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACTTTAAA AGACAGTAGA TATTTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTTCAACT

AAATTGAATC ATGTAGTATA TCTGATTTCA TAGCTTTCTG GGGGAAAAGG GAGGATTTGA ATTAGCAGCA GTGCAGGTCA

GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC

CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAAT AGGAATCGTC AAATAGTTCA AATTATCCGG

GGGAAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACGTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAAGTTG TTGAAGAACC

TTCCGTTGGC ACAGATTGTC CTTTTTCACA AGCATACAGA AGCCTCCTTC CGCCCAGGNC TCTTCCGTTG CATCCTTGCA

AATGGCTCCC ATTTGACACA TTCCTAAGTC TAAGAGATAC CCACTAGGGC AGCTTGTACA GTTCTTGAAT CCTGGGCCAT

TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGACT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEO ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TICTITICIT TGCCTGAAGA CITAAAACTA AGAAGATTAT TCGAATGGIG AATTAACTIG TIGAAGAGAC

TATTCCAAAG GGATAGAATG AGACTAATTY CIGACTATGT TITGCTAGIG ATGGGTGGAT GGGAACAAAC ATTACAAGAA

ATAGCATAAT GAATGTAGAA AATATTTCAG TITGGAGATG TGCATGANIT AGTITCCTAG GITTGCCACA ACAAAGCATC

CCAAACTGGT GGCTTAAAAA ACAGAAATTT GITTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGIG TTGGCAGGAC

CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCCT

SEO ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGIGCAGGIG CATACAGGAA GGACCATGIG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA

GGGACCCCAA TCCIGCIGGC ACCTAGGCCI TGANCITCCA GCCTCCAGAC TGGGAGAAAA TAACGICTCA TTGTTAAAGC

CCCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA

GAGGAAAGAG ACGIGCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTC AGIGGGNCCA AGTCCAACTA

GCAGTCAGCT CAGAAATAAT CCCINAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CCTAGAAGCA GCCAGGAGGG AAGTACTGAC CATTTAAAAG TGGCAGATCT CCGGGCCCCA TITCTGCAGC
CTTCATTCTG CAACTCCAGG GAGGGTATTT TINATTTGTG GGTTCAAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT
TTGTGTTGTA AGTAAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTTG TAAAACCATT TGGATTTTTT TAAAACAAAA
GTATTAATAA TCTGGAAGAC AGINTIGCCC AGGTCAGGAG TGTTTTCTTG GTGGTTCCAG CCCCCATCAA TTGAACTGTT
TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGGG GCTTTCCCAC CTGTGGGGGA GGGCACAGTT
AGGATGTTTT T

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SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCICAACT TICTGITGGA TICCATGCIA AGCAAGCIAA CCITATCCIG CATTGITAGC ACIAGGCACC

CAGCIGCCAC CICCCATCC TGCIGCCCIT AGGCCACATG GGAGCAGICC ATGCATGACA GCCTCTATCC TACAAGGCCT

ATGAGIATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GIGCCTCITT GICTGCGIGG GICAGAAGAG TIGIGCACGC

AGATTAGCAG GCCAAGGICT GAGCCACAGC AGCATTTITA TITCAGATIT TGATAACTGI TTATATGTGI TGAAACCAAA

NIGNCATCIT TITAAAGCIT ATCCATAAAA AAAAATAGAT GICTTITTATA GIGGGAAAAC ACATGGGGA AAAAATCATC

TATTTTGATG CAGCATTTGA TAATGNTTAA ACACCICACA CCTCACTCIT

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GAAAAATECC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCTTCTTC TCAATATGAA ACATTAACTA
GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATTA
CAAAATTCTG CTTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTTGT TAACCACATT CCAAAATGTG
GAACATTTCT TTTAGAAATG AAAATATTTC AAGGCTGATG TATTTTAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG
TTCGCTTAAT TAAAGGTTGT TGGGCATCAA ATTATGTTTA GTAGGTTACT ATTCTCTAAC AACTCAAGGN TGCTTTAATG
G

SEO ID NO:1030: (Length of Sequence = 340 Nucleotides)

TICCCGCTTG ATTCCAAGAA CCTCTTCGAT TITAATTTIN ATTTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC
CATGGAGTCT CGGGTCTTAC TGAGAACATT CTGTTTGANC TTCGGTCTCG GAGCAGTTTG GGGGCTTGGT GTGGACCCTT
CCCTACAGAT TGACGTCTTA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGCGTC AGGTCCCGGG GCTGCATAAT
GGGACGAAAG CCTTINTCTT TCAAGATACT CCCAGAAGCA TAAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA
GCTTGAGAAA TAAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG CNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC
TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC
CAGGCCCAGG GCCAAGAGGG CCTCACAAAG GGCTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCCTG AGCGGACCAC
AGCCCTTGAG CCCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA
GCACAAGAAC TGCAAATACT GTCINGGNCA GAGCCACCAG AGGCCTTAGG CTTCTTAGGA CACCGATATC CCCCATTCAT
GGGGTINGGA GGGAGTGGCT TTTTTAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCIACAG AAACATAAAT TATACIGAGT TGTGCTGTAC TGGTTTGTGA GAACATCAGT GTATTAAGGA GAATGGTAGT
TTAATTTGAA TATITAAAGA AAGTAATTTG AATGGTTCTA GTACTAGGGC CATTATTAAC TAGTAACATA GATTAGTGAC
TTCAACTGGG TGTCCTTATT ATCTGATTTG TCTGAAGTGA AAACTGTTAA GGTGCTCTTT TAAAATGTAT TTGGAAACAC
CATAGTTAGG GTAAATNCAA TGTCACAATT CACTCTTGCA TATTATTTNC TTAGGCCAAAT TTATGAATTC TAAGTTAGGC
CAAATTGAAG GTTTGGAGTT TTACATTGTG GGNGAGTCTA AATTCATGCG TTTGGCAAGC ACCAAGGNCA TGGGGAAAGA
ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

AGIGGCTIAC AAAACACAAA TITATTATCI TACCATTCIG TGAGICAAAA TICCAAAATA GGIGTCACTA GGCTAAAATG
AAGGACTGCA TITNINCCIG CAGGCTCCAG GAGAGATCIA TGICTTACIC TITNICGGCTI CTAAAGGCIG CCCACATTCC
TCGACTAGIG GCGTCCCTCC TICATCTCIA AACCCAGCAA CAACAGGIIG AGICCTCATG TCACATCITT NITACCTITIC
TGICATCICA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTITAAG GGCTATCATG ATTAGACTAT GCCCACTAGA
TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CECECCEGA CEGACECCT CAACCECAA ATCCECGAGE AGETEGCGAG TECAGTEASC AGCTCCTACA GGAATGANTT CAGGGCATEG ACGGACATCA AGCCTGINAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGCCCAG CAAGCCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA AGAWTACGCA GCCTCTACAG CGAACCCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTCAGAGTT TCAAACCAAA

SEO ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTT TCAGTGGAAA ATAACTTINA TTGAGACCCC ACCAACTGCA AAANCTGINC CTGGCATTAA GCTCCTTCIN
CCTTTGCAAT TCGGTCTTC TTCAGTGGTC CCATGAATGC TTTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC
TTGGAGGTG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGCGGAG
GGTGAGCACC CGCTTCTTGG TTCCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA
AGCCACCCAG AGGGTTGATG CTCTTGIMAG ATAGGTCATA GTCAGTGGAG GCATT

<u>SEO ID NO:1036:</u> (Length of Sequence = 304 Nucleotides)

CTCIATGICI TCTTCTTTT GCTTCTCCTC AAGTAGAG 3 TGACTTTTT GAAGGTTAGC TTCTTCTAAG AGTTGCATGC
TATINCIGGC TCTTACAATA GCCTCATATC TCINATTINC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT
TCCAGATGIG TATTINCGGN TCINAATIGG TIGGCTTCTT GGATTGICAC ACATAATCTT ATTTCTAATT GTTTTATACT
AGACTGIAAC TGCTGTAAAC GGCTATCTGA TGCTTCCTCT CTINCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTITATAGC AGTACITCCC ATTAAAGTGA ATAACCAAAA TCACITTAAG GTCAAGATCT TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCITTT GCAACCITTT AAACTTATGA TGAAAAAACAT TAATGTCAGC TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT TTANCAATTA CCCTAACITG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT GGTGGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGGNT CCCTTGGGCC CAGGAAGTCA AGGTTGCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC
TGGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA
TAAATGTAAG ATGCCAACAC TAGGGGAAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTGC AACTTTCCTG
TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGGA ACCATGGCCT TCATGATGGA CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTTNG TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGINAGT GCTTTCAAGG GCAAAGGTTA GAGCTG

SEO ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGICAAGA AGAGCITAAG AAAATATAGG AGATACTACA GCATGITTGG TICATGACCG GAATGATTTA GIAAGAAGGA
AAAGCCAATA AIGTAAGAAA GGCGATTGCA GGAGCAAAGA CITTAAGGAA TAAAAAGGAC AAAATTGITT GITTCTCAGG
GAAGIAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CITTTAGCTT CAGNICIGCC TGACATTTAT TGGICATGIG
GCICTGGGTG TATTCTCACT TCTCCTCCCT AAATAGCAAG AAGGAAAAGC CICTIGGAGC CTCGIGTCTC TGCTTCTTTC
TGTACAATGG TTATGITTCT GNICCGCTTA GCTGGTTAAT TATAGAATCA CCCINGCTGG GGICTITTGG GGACTGGCC

SEO ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAAACAG TCCGTCACTG ACAAATGITG TTACGCAGCA CATTTTATGC AGTGTGGAC CATACACGAT ACACAGAGGA
AATTCAGGGC TTCTAGGAAA CCTTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCCTCACC CCTGCACTGC
ACCAGGNCTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCCAAGCAC
ACCAGCATCT GAAAACTTGN CATCCTTGCC GATNTINCGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC
CGGG

SEO ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCIGITTCT CAGAGATGAC ACTGCCAACA ATCACAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTTAC
AGTAGTGTT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TGNGGTACTG CCATTTGGGN TTTTTTTACAT
GGNCTTAGCT TAAAGAACTG GTCTTTAGCA AATATTCAAC AGNTCAACCT GA

SEO ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTIGGAGAA AGAAAAATTA GAGAATICCA GATCCITAGA ATGCAGATCA GATCCAGAAT CICCIATCAA AAAAACAAGT
TTATCTCCTA CITCIAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCCTGAGGCA
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTITAAATC ATGCAGATCA TTTCATCAAA ANTAGTNCAG CAGCAAGATG
AAGAGCGACG TCGGCAGCTG AGAGAGAGAG CTCGTCAGCT AATAGCAGAN GCTCGATCTG GAGTNAAGAT NTCAGAACTT
CCCAGCTAT

SEO ID NO:1044: (Length of Sequence = 285 Nucleotides)

GITGAAGCIG TITTMATIIC ACACCCITCT GITTIAAAAC ATAGGGACIG ACAGGGAGAC CCAGGGCTGC AATCTGGGIG GIGCIACATI TGIAGACAAG GACAACTIGC TGIATITITAA CCCAGAAACA TIAGAAAGIT TGICCITGAA CITCIGGCIC AGAITIAGAT GCATCITIGA AGIGCIGATA TTIGGCITAT CIGAAGCITT GGGATTATCA TTINCTAGIT ATGAAGGGAA TGAAAGIGIT CATAACATIT TIGCAGGIGG AAGGIAAAGI TGITG

SEO ID NO:1045: (Length of Sequence = 317 Nucleotides)

TOGGITACTG TAGTATTGIA GIATAGITTG AAGICAGCIA GIGIGATGCC TCCAGCITTG INCITTITTCC TCAGGATTGI CITGGCIATA CAAGGICTIC TITGATCCCA TATGAAATIT AAAGIAGITT TINCIAATIC TGTGAAGAAT GICAATGGIA GITTCATGGG TATAGIATTG AATCIATAAA INATITIGGG CAGIACGGNC ATTITCATGA TATTGATTCI NCCIATCCAT GATGATGGAA TCTTTTTCCA TITGITTGGG NCITCICTTA TTTCCTTGAG CAGIGGGTT GTAGTTCTTG GACAAGA

SEO ID NO:1046: (Length of Sequence = 316 Nucleotides)

CCAGGIGCAA TCTCGGCTCA CTGCGACCTC TGCCTCCGCG TAGIGGGACT CCAGCIGTGC ACCACCCAGI CAGCCCCACG
CCCACCCTGC CAGGCGTGTG CACGGTTCAG CGTCACTTTA CAGATGAGGA AACINAGTCT TTGGGAAGCT GACAAGGTGC
CTGACACAGG CCAGGGCAGG GNCCACCCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG
AGGGCCCCT CAAGGATGCG CCGTCGAGIN CCCGGGGCCC TTGGCATGTN CCTGGCAGAG AAGGCAGCTC AGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCCTCAAA CTCGGGTTCC AGCTGGGTCT CAAACTCAGG CTCCAACTGG GTCTCAAACT CGGGCTCCAC CTTGGTCCCA
AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCACCACCT CTTINTAGGT CTCANTCTCC GACTCCTCCC AGCCAGCGGT
GGTTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGNGTG GCAGGGCAG GGGGCAGCGT GGGAGGCACA
GTGTNGGGGG CCTAGGGTGG T

SEO ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA
CACCTCCTGA TTCACAGTTC AGTATTTTCG GCCACTTTAC TCAAATATTT TTATAAATTA TTTTTAAATC GGCAAAATAT
TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TTNGGGGAAA ATATTCTAAT
TTTTTTAAAC AGAAAAAGCT AGGNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA
ATAGGGTTGA TTCAACTATT ACCTTCTCCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEO ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GIAAAATAAT GCATATITAA GGGAAATATT ATACAGACTI TITCACACAG AAGIACATAA TANGATTITI
TAAAATCTAT TGCCATTCAT TIATITITGC ACAAAAACGI ATAAATATGI CACCAGCTIT NCITAACTTA AAAAACTTAA
ATAAAAGACA CCAGATGAAA ACTACCCTIT GCTGCCATIT TITTTTAAGI TITTTTGTAG GGGITTITTA TITTTGCRGI
TITTTTNCTT TINCTGCTTA GAATTGGGIT TCTAGGGAAG AAAAGCCCCT GCATTAAAAA CAGNCCATIT AAAAAAAAAA
TTCAAAGITC TGGAT

SEO ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGAGGG AGGAGGGAT GIGGAAAATA IGCAAGATAA ATTAAATNCT TAGTTAAAAA AAAAAAAAAG TITCACCAAC IGINCICCAT TACIGAGAAG CCCCCACACI GCCCCACTGI GCATATICCI AGTATITCAT CCATGICCIG CICIGCIGIG CIGCCCTACA AAAAANCCCI CCCGGGGGG AAAAAAAAANC AAAAAANCG IGIGGIGA ACIGCIGAAG AACITAAATG ITCAAGAGCA ICIITAAAGI CIAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTICTAAAA TECTICICAAA TACTAATATT ATACATICTIC CCATTTATCC TCAAAAAACC CATEAGACTG GIGATGTAAT
TNCIGIGITC ATTICACAGC TGIGGCAGIC AGICTAAAGA CCAAGIGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA
GAGCTAAGGC TTAAACCCAG AATTTAAAAA TTITTITTINAG CTICINGITT TINCCATTAT ACCAGITTGG CCCTTCATTT
TATICATGGG TTAAATTAAA TTATGGTAAC AAAGGGCCCC TGGICACTTT GGACATTT

SEO ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG GTTCCTTCCG GTGGGTTCTT GGTCTCGCTG ACTTCAAAAA TGAAAGCCAT GAACCCTCGT GGTGAGTGTT AACAGTTCCT TCAAAGATGG TGTGTCCGGA GTTINTTCCC TINCAGAATG TTCCAAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGTT OGIGGICTIG CCIGATINIC AGGAGIGGGA GCCGCAGAAC CITIGCCIGI GAAGIGITAA CAGNNICITI AAAAGGIGGG TGGCATCIGG GAGIITIGITC CATTICCICC CCAGIGGGG

SEO ID NO:1053: (Length of Sequence = 195 Nucleotides)

GITGCAAATT TGTATTCCCA GTGTTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG
AAATAGATTA ATGGCCCTCC CTTCCAGGGT AAGTGNAATT NCTCACNCTG TTAAGTTCCC ACTGCAAGAA GGTGGTTGAC
CAAAAAGAAG CCNCGTGCCT CCCCCTAACC CTTGA

SEO ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGITCICAC AAGAGCCCCT GCTIGCAGAT CACTIACATA GTTTTIGGGG AAGCCAAGAT CGAAGATTIA
TCCCAGCAAG TCACAACTAG CAGCIGCIGC AGAAATTCAA AGTTCAAGGT GCAAGCIGTC TCAAACATTG CAAGCAAAAC
ACACAGTACT TCCAACTGTT ACAAGAGGAG GAGIGCAAGA GGAAGAGGTT CGCIGAAACA GGIGITAAGTA AGTINAAGGT
ACATAGANIT GGITCATGTT CACAAGCAAA TGIGTTCGAG GGNCAAAGGN CAGTTCCGAG CCCTGTAAGT AACAACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAA GAATCAATGA AACAAAAAAT TAATTTTTIG AAAAACTAAA ATTGATAGCA CTAGCTAGAC TAACCAGCAA AAAAAGNTAG CAAGTACCTA AATGAAAANC TGNAAATGNA AAAAGGAGGA CATTTACAAA TNAACACAGG AAATACAAAA GTTCCATGCA GCGAACTTAT TCACG

SEO ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAAATTAA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGGA AGCATTTAAT ACCCAACAAT ATCTGATTAC ATTGAAAATCA CAATGGCCTC CCTATCAAAT VAGTAGCGTT ACTGTTTGAG CCTGVAAAAC TTTGAAAATA ACTTG

SEO ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTITICATICA AAACCCATCA CAGAAATGGA CAGCITGGGT CTGTAACAAA GCATTCATGT TTTAGAGCAT AGGTCAGTAA TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAACT GTTCAGNNCC ACAACTITIN CAATGTTTAA AACAGGATNA AGCCTTCCCT GTGAAAAGCA GCACCTTTGT GAACGGTTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGIGCAATAT GCACATTACT AAGCACAAAA AACAAGIGTA ATTCAGAACT ACTTGCATT TITTTAGITA AATGCCAATG AATTATTATG CCTTAGITTT ATGAACCIGN CINCICCITG TGCAATTCCT TCCTTGCAAA TGAATTGACT TNAACGCCGT NAGIGAATAG CCTCAGNCTG TAGGATGICC TITCAAATTT T

SEO ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCACACTGGC TACATACATG TTTTCCAAAT TAAGTTTTCT GATGGCTCAT CATTTGCCAT CTCTTCAAAT CCAGGTCCTT
TTAAAAATCT ATGACCTTGG AATGAATGTG CCAGAATACC TGTATCCTGG AAGTCCATGC GAATNTTGGC NTCGACTGCC
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GTTGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTTGGG GGACAAGACC CAATCCTTCC CCACACCAGG CAAAGCAGTA TTGGACATGA GTTGGCATGT GGCTGGGCCC ACGTCCTTAT CCCCCAGGNC CTGNGGGGAG ACCACCTTTC TGAATGGTTA ACCAACCCCT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA ACCCTTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEO ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA

TCAGCGTACA GCAAAGTGGG TGTTCCCATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG

CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEO ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCTCAC AGAGITITAG TIAGAATCAC TITCTCTATT TCCACAAATC CITCTTTTCT TICCTTTTAT TITCTAAAGT

GAATGICCAA GCAAAAAGGA AGCAAAAATG GICAAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACAACTTGG

AATTCACCCT GIGCATIGAA AATNCAACTC CACACTGCAA ATTATGGCAT TITTTCCCNC TCAAAGGAAT TAGIGAACTC

CATTGGATGC ATTCATACIN CIGITTAGGN AATAAGGGAA ACCGCTTTGT AAAAGINCAA CATGGCCTAG GAGITA

SEO ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG

AGTATTCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGGC CCTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC

TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGGNGG ...ACACGCCT ATTAATACCC AGCACTTINT GGAGGTGCAG

GGAGTTNCGA GTACCAGTCC TGGGCCAACA CGCNTGGAAA TCCTGTTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length r: Sequence = 322 Nucleotides)

GAAAGCATTT GAACTAAGIN TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG
GAACACTGAC TTGTTTCACT GTAACTTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAAG
GCTCTGGCAC TAAATTCACT GCTACTTAAC TTAGTTTACT AATTAACTTC CTTAATTATA GTTTTCCAAA TCCGCATGCA
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTENCARC TCCTTGCATG GACTGATGCT GGAAACTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC

AGGCTCACCA CAAGTTCTAA AGGCCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTINCTG

GGATCCTGAC TGTCCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT

TCCCTAATCT ATNAGGAAAC ANTTAGTNAC ATGACCTTCA TGGGAATTTA TTTATGA

SEO ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACASTGGGAC TGTCAGAGCA GCCAGCTCCT CCCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT

AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GMTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCCTGNG

TGGGCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCCT

GCATGGTTTC ATGCCTGTAA ATCCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTGTTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT

AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC

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AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEO ID NO:1068: (Length of Sequence = 412 Nucleotides)

TEGECCAGCAT CIGGGAACIT TEGGITGITE GACCAACITC TITCCAACACE TEGECACTGA TEGECCEGGE CCCAGCCAGG
CCTENCTEGA AGGSTCITCC CCGNCCCGAG GGACTGIAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA
TNCAGGNCAG CCCATTGACC CATTINAGGG GACAGCTGGA GGGAAGCCCG GAGTCCCTTG TITCTTCAGC TGAG

TOCCTCATGA AGATAATTIA ATCCTAGACT GATTTCTGCA GAGTAAAATC TGGCATGTNC TTCAGGAAGT TTTCTTTGTC
GCTGCATATG AAACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAATCTGC TTTCTGTCTG AAAGCAAGAA
TGCAGCCTAA CAAGGAAAGG ATGATTGGAT GCCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC
ATCATTAACA AGCTCTTTTT TCACAACTTT CATTGCATAA ATACGATCTG TTTTTTTTTAA TCGAACCAAC AGTACTTTGG
CATAACTTCC TCTTCCTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG
MGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

SEO ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTIATGA ATTCTCGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT
CCCTCATAGC ATTTAAATCT CTTCCACTTG ATTAAAAATT CCTAGTTCCT CTTCACTGAA TTGTTTAGAG TTTTTNAGCA
GCCTCTGCCC TGATTAAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC
TCCTTAATTA CTTTTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGGCCCTGC CTGCTCTGCA CCGTGAACTC
ATTTCGTGTA GCTGCTGGAA TAAAACTCAA GTAGGCAAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA
CTGTAGGGATT G

SEO ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTITT ATAATTATIG GAACATGAAA CIGIATITCT ATGAACICAA TGATTITTIT CCATAAAATT ATATGCIAAG AGAGICACCA CAAAACTATG AATTCICCCC CGAATTATIT TIGCITCIIT GGAGCACCAT AGICITTGIT CAAATCACAA CATGAAACTG TIGCIGCAAT GCIAAAGATG TGAATCCACC ACTATCAATA CGGICAGGGT AAAACCTGGA GCCACATGIT ATTCAAGITA TITTTGITAT CTAATGATTG ACATGAAAAT AAAATAGIAA GCCAATATTA AATTIGIAGG CATAGITGCC CCACCINAAA AGIGITTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GITTICIGIC CIGGCIAGGA TAATGCAAGC NCTITICAGA TGANICAGAA TCGAAGAAAA TACGCIGGIA AAACAGGACC TGATITACCA GGNACIAAAC AATTACACIC CCATITCCAT TGCITICAAT ATTITCACAC GNIACACGAA CCITIAAGAT GGAAAAGGGAA AGCGATITIT TNITCAACAA GTGGGCCACC AGATGAACCA AATTAGA

SEO ID NO:1074: (Length of Sequence = 379 Nucleotides)

GITTAAAATT TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA
ATACATGCCT TCCTTTTGGG GGATGGGCCT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCATT ACTGTACAAA
GAAGGTACCA CTTGGTGGGA ACTTTCACTT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC
TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC
TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEO ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGITGA CAGICCAATC AGAAATATIT AAACAAAGIT TCACTACITA AACACCATCI AAATATACIT TITGITATAT
TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TITTCCCCCT AAAAGGCAGI TTAGATGINC
TCATICTAGG NITTCCATCI CICICCICCA CCATICCAAT TCCCAGAGTA CCTCTACAAA TATCCCIGCT TACCAGTAGA
NCTATITGCT TTAACAATCI TICTGIGGGI AAGGAGATGC ATATGCCAAT GIGAAAACTA TGGAGGGGGA CTCCTGCCTT
CAAAGGCTGA CTAGAAACCA TIGGA

SEO ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGING CCCAGTGGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCCGCCT CCTGGGTTCA TGCCATINIC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNACCACGCC CAGCTAATTT MTINIGTGIG TGTTTTTGGC AGAGACAGGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC CCGCCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAAA TMACCG

SEO ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGI CACATITIAC CCATGAAACC TITCTAAATT ACCITTIGCA TITINITGCCI ATCCITCIAC ATCATCATAC
TTCGTCAATT AAAGTCACIT TITTGGGIAA CATTTCAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA
TTATGATGIT GTCATTGCIT ACACATGGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG
AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTCAC CCTCTAGGAN CCAAATGGAC TNGGAAGGAA GTAGAAGATG
GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GITTIAAGTGC GAAGATITTA TIAGGCGGTA CAATTCCAAG GIGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA
TIATTGAGCT GAAAACAACT TIACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGINT
GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCCC CCTTTGGGGA AAGTATGCCT CACGGACCTC
TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCCAGGAG CATTCTGTTC CTTCAAATTT
YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CITAAGITAC TGAAATTGAA ACACCCITIG TCCTTCTCGG CGGGGGCTTC CTGGTCTGIN CTTTACTTGG CTTTTTCCT
TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGIT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT
AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCCT TTTACAGGGT AGTAACTTCT
CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAACTGT
TAGAGGAGTG CTCTTCCAAA CAAAACAAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT
TNAAATCAGG GTAACCCCTT TCTGTATTTG AGTGCAGTG

SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CIGAACTCCC TGAAAATAGG AAGICTCAAT TAAAAAATCA ATTIGICATA GICCACATAA AGATAATCAA TACATTITGC

TCTCAGTCCT TGGGATGGTT TITGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC

ACATTCCAAT GITACCTGGN ATTAAAATAT ATACCAACAT GCATCITTAG GITACTCTGG TCCATGGTTT CCTCCAGTGG

CAATGGAATT TACAAAAATG TAAGACGIAA TAGATATATA ATTATCTTTT TNCCTAAATG AAACTAGCCT TAAAAAACTGG TACATAATGG TTCCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG

ACCITAAACT GIGGACICC

SEO ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGITTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAAACTCTG AGTGTGCCTT
TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGCGG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC
TTGAGGAACC ACTGACAGAG CAAAATCATG CTGACTGCTT AGATTCAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC
AGTGCCAGCA TTGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT
GCGGTCAGAG AAGAAACGCC TTAGGNAGCC AAGCAAAGTG GCTTTTGGAA TATACAGAAG AATATGATCA GATATTTGCT
CCCTAAGGAA A

SEO ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCTCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT
AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTTCT GTACTTCAAG
TTTCACGGCA CATCTGATAG CTGTNCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN
TTTGGCTTGA GCGACTTTAA CACGTTTATT TCAAAGTAAT TTGTGTTTGT AGCCCCACTA AAGTAATTTT GCGCCAGNAA
AGGTTCAAAA TACGGTTTTC CCTACTTAAG

SEO ID NO:1083: (Length of Sequence = 430 Nucleotides)

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAAGA ACAACACAAA GAAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGGAAAAG
ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAANTTTT TTTTCAACAC
ATAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACACT TGAGGNGTCC TCTTCAAAGA CTACAGTGGA
TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAAATGG TGCTCAATGC
AGATTATCTA TCATTANACC ATTTTTAAAG GCAATTTNIT ATTTAAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCITINA GCIGGCATAA TITAACGITC TAATTATCCC TTAATCATAA GCIGTACGAT TCTATAATTA AAAAGITAAT GCCITCITAA TGICTATNCI AGIAGAAGAA TGATGAGAAA ATAATAGIAT AGATTAGITI TGGICTCTAC TCATTITGCC TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GIGTAAATCT TGAAATCACT GAGCATTCAT TTTAGCTTCT CATTGAAAGG TAGATATCA GTATGAATTG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACTT GATCTGAGAA TTACTTGCTG GTGCATTTCC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT AAGGAGGGCA GCT

SEO ID NO: 1086: (Length of Sequence = 277 Nucleotides)

SEO ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT TTTTTTGAG ACATTGTCTC ACTGCGTCGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCACTGCAA

CCTCTAAATC CCAGGTTCAA GCGATCCTC CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC

GGCAGCATTA TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA

GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT

TTTTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEO ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT TTCCCAGCAG GCGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNTCTCCC MINCTACCCT GGAA:NATAA GTGTCAGGTT CATACTTAAC CACCCCCTT

SEO ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA
AACATTGAAG AATCAATGAG TGCCGGAAAT AAACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAT GGCTGTGGAT
TCAAATCCCA GACCAATCAC TGANITTCAA GCCACITITGC CTCTCTGAGC CTCTGTTTTC TCATCTGTCA AGTGGCAATA
ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAAA
ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTINTGGGC CAGCAGCGGC TGGGGCTCAT CCCTCCCTGG
CTGGGTCCA

SEO ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCINICC CCATTOGAGA GGATGAGGAT GATGATCIGG ACCAGGAGAC ATTCAGCATA TGTAAGGAGA GGATGAGGCC CGINAAAAAG GCACIGAAAA ACCIGACAAG GGGCTCAAAG TGCAAGANCA GCTGGAACAC ACCCGGAACT GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACT CTGGAGGAGG AACCTATGGA TTTTTGTTTC CAAGTTTACA GAATTTAATG CTCGAAAACT GCATAAGTTA TNCAAGATGG CTCATAAGNA AACGTCTCAA GAAGAAG

SEO ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACIACCAC AGGAAATCTC TATACCCTTC TIGGCTTTTC CTTTTAATGT AATTTTCTTA AAAGCTTCAA GATAATTTTT
AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAATGT TTCINCTGTT
GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAAT GIGITACIGC ATTATTITIGC ACTICIGAAG GACIGCAAAC ATTITITCAAG CACAATAAGC AAATTCTTCT TICAAAAAAGG NATACITING CACATATGIN AGGITTGGAA AATGACTAGG NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAATG CCTTGGGAAG ACAGATGCAT TITINCCCAC TGGTGTTGCA ATTGCTCAAA TATTTTNAGG ATGAATATCC
TCACCTTGGA GGCAAGTTTT TAAGAGTGAA TTTGAATTAC TGGAGCAGTG AACAATTATT TAGAGTCTGG TATAAGTGAA
GAAAAGAATC ATGACCNGTA AGCTGTCTTG NAGGTACCAG CAAACTGNCT CTAAAATTTA TATGGAAAGG CAAAGGGGTT
AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC
AAGGCAATGT GGCACTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GEACCITETT TEACATTCIG GATTITCCIT TITACTITCC TAATGATGIA ATTIAACINC TECCIGIATT TNCCATATIT
CCTATAAAAT GEIAGTIAGA TCTAAAAGCT TGATTTACTT ATTICAGATT TCTAGICAAG GETACTCAAT AGATTGIATT
TCCTTTIGCC TCACACGGAG GIGCATAATG TCTGCCIGGC CIGIAGIGAT GCTAAGGITG ATCATTCIGT TCACGIGGCA
TCAGICIGIG ATAACTICCT GIAAGAATCG TTCATTAACC TITCATCIAA TGGNTCCATT CATTCATGAT CITTAACTGA
ATCCCIGITA TITCATTAGG GAATAGCAAA ATAATGATTT TCTAATTCIG TNATTCCTTT CACATTTATT AACIGTAATT

SEO ID NO:1094: (Length of Sequence = 414 Nucleotides)

GICAGINITC CATAACIGIT TCCTGCTGAC AAAGGGGCAG TGGTGATGGT TCTNTGGGTC TTGGCCTCTT GCTAGCTGTC ACAGCAGGAG GGTGGCTTIN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGGAG CAGGGGCAGG GTTTINCCAA TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCCAGTGC AAACCCCAGC TGAACGCCAT TTAGTTATAT NCTGGTGCGT TTTCCTTCTG CAGGAACTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG GGGGCCAGAG TGACAACTGG TAGAAAACTA TGTTATTCCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG AGTCAAGTTT ACAA

SEO ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGI AAATAGICAT ATGAATCCIT CAGAATGGAT AACACAGCTI INCTGACTGG TGTGAAATAG
TTTTCAGGIG CTCATTCTIT ACTTCATTAG CTTATCTITAT ATCATTAGCT TATCCTCCAT TCAGGIATAA CAGATCTITT
TTTTCTGATA AATATGGCAG TTTAGGGAAA TAAACTATGG CATAATATGC TAGGCCATTC TTCTAGGCCA CGCTTCTTTG
ATTGIAACCT TAAACCCTTT ATCAGAACCT AAACAACTTT TCAAAAGATC TATACATATT TNNATCCAAT GITTAAGGCT
ATGAGTAATT CATTATGGIC ACTCTTCATT TTINTCACCT GATAATGATC TCGNCAAAAA TGTTGAG

SEO ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TITAGAATGA TIGAGGIAGC TCAGAGCAAA AACCAAAAGG AAAGGIGATA TGTAGATGIC TGGGCACTCA CATCATAGGT TIGGATAGCT AGTITAGGAG TAAGIGAAAC ATTITAGAAG AGCATTIATG TITAACCTTGA CAATAGGATG GGAGATTCTT AACCCCCCTT GIAATATGCA CCGATTGATT CINAGITAAA ATACACCACA GIGACAGTGA TATCATCCCT GIACATCCTC GCCAAGTCCT CIGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGITCC CGATGGCATG TCTGATCAGC CGCGGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTG CTTTCCTCTG CAGCAGCAGG CTCTGCCAATG

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SEO ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGCC
ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCTTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC
CGTGGTTCTC AGTAGAAGCT GTAGAAGGATG TTGGGAAATT GGGGTGGGTT GGTCACAGTG CCTGGCATCT GTCTCAGGGT
AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC
TCATCATTCT CTGAAGATGT CAGGGCCTGT TTGFTTGTTT GCCTGTTTCT CTCACTTTTG CCTTATAATC AGTTCTTCCT
TGTTGG

SEO ID NO:1098: (Length of Sequence = 326 Nucleotides)

GECCOGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA
AGTTATGATG TGATGAGTTT TGGTGTAATG TTTTTCCCTC CTCTACCTAA AACCCTTCAT GCCTTCCCAT TGCTCTTAGA
AAACACTCCC CAATCTGAAA CATGACCATT TTTCGTTTTN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC
CAAGCTGGTG CTGGTGTCCT TCCGNCAINC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTTCA GTCTCACTTT
GCACTT

SEO ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAACGAAC AAGITICAGC AGICIAGCCI TIGGATGACC TATITGAAAA CCACTGAAAG TCGIGGAGGA AIGGGCAAGA
ACCACCICAT GAITCINCAG GCCAITGCIA ACGAACAGCI CATIGCIACA ACCAGICCAG AGGITITATI CCCICTACIC
CGAGCAATGA AATAGACCIG AGITATGCIT CCITTCATIT AATITCIGCA GATAAATAGI TICCIGAGCA AIGGATGCIA
TGCCIGGATA CCAGICICCA CITIGCACGC CGGAACTGCC TIGGGNCCAC AGITACAGAA AAAATGTAAA CTCAGAGTGA
TCCITGIGIA TATIGCIATA GA

SEO ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCECTTEAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG
TCAGGTATEG TGGCGCATGA CTGCAGTCTC AGCTACTTEG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGGAAGTAGA
GGCACAGTGA GCCATCATTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAAA AATTAAATAG
AAAGTCTTCT TTTTTTAAAA TNCTGCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAAACTT AGTGAAGAAG ACATGTCAAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTT CCAGAAAAGTT TTGAACTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATOGAGA COATOCTOGO TAACACOGTO AAACCCCCTO TOTACTAAAAA ATCCAAAAAA ATTAGOCGGG OGTTGCGGCT GGCGCTTGIN GTCCCAGNTA CTCCGGAGGC TGAGGCAGGA GAATAGOGTG AACCCTGNGN GGCGGGNTTG CAGTGAGCCC GAGATOGGGC CACT

SEO ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCIT GCTATGITGC CCAAGCTTGT CTCAAACTCC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGIT CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGIT CTGTGTCCGA GGAAAACCAG

GAGIGATIGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTICG GCAGGGACTT NGGGTACCCC TGITCTIGGA TGGCACATCA TTATCAGCAA CAGGAACAGT TICTCTGAGC CCTGGGCCCT GGAGAATCIC TAGCTTAGCT ATTTTAGACT TGGGGTCAAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEO ID NO:1104: (Length of Sequence = 400 Nucleotides)

GEAAGCAAGA CAAAAAAGGA CAGAAAAGCT GGITTAGGTC TICAGIATGT TIATITGTCC CICACATAGC GGCTTGATCT
GTCTGCCTGT GTGTTCACAT AGITAACCAG AAACGCTAGG AGGAAGITGT ACCAGTGGGA TACCTCCTTA GGTGCCAAAG
TTTTATTTTG AGAAATAATA TTACTTTCCT CITCTGAAAT AAAATAATAA TAATANGANT GAAACCCCCA AACCACAGTG
TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTTATTCCT CAGGAGGTTT CCCTGACTCC TTAAATGTGG
CTGATGTTC ATGGTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGIGCAG AGGIGACCA AGCCTGGGAA GGCCCCAGGG GTCCAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA
CGITCTGTCC CTCANAGIGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTTGTCCTC AAGGGIGACC
CTTCTTGGCC GCCCACAGCT AGACCTCCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGNCAGCTNC
TCAGCCACCG NTTTGGCATC TTGTCCTTNA GGTAGGCGCC TTTNTTGCCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA
TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCCGGGCC AGAACAAAGG

SEO ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGIATCINIT TGANITCIAA ACCCITGCIT TICCCACTGC AAATTGITIT GGCIAGAGA CAGGCIATIA AGACATTCIA
GCCAAGCCAA TITCCIGAGA GINCIGCAGG TACCAGGIGI TGCIGGAGCC CAGCATCIGC TCAGAGGAAG GCAGAGAGAC
CCAGAGGAAC CCAGAATGAG ACACTCATIT TIGCATCCIC AGITTCCAAA TIAATTTINIT AGCICCIGGI TAGGACCCGA
NITINCAGAGA CCAGGCAGCI NICCAACAAG AATGCIGACA GGITTCATIG TCCICIAGGG TAGCIGCIGN CIAAAGAATA
TITGATTITI TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTITAG TITGAGICAA TATCIGAGAA AAAAAGAATG GAGIAAAAGC ACAGAAAGCA AAACTIAGCI TAGAAAATAT
TICCIAATIC AAAAAATGAA CAAGICAGAT TCIGIAAAGA TATCCAGIGA AATCITGAAG AAATATIGIA TIGATIATIA
ATTAANCIGA TIGGAAAGIG ATCITGGGIT CACAATGAGG TIGITGAACA AGIAGCATIT TCATACAATI GCAAACCAAT
TCAATGITIT INCATACACI GITTACAATI CITINCAAAA TITGATITCI TCTTCGIGAT CCTAGICAAA TICIGCCTTC
TCAGIAAATC TITATCAAGI TIGCAG

SEO ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GIGGICCCGG TAGGAGACTI AGACCIGAGC TGGATCTGIT GACCCCAAAT TGIGCTITIC CCACCAAGAA
GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCTGAACTA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA
GCIATTCGGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTTCTT GACATTATGG TAATACATAA
AGACTITGIT TCCGCTGGIG TGTGTCTGIG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCCTG TGCAAGCCTT
CCAATGTCGN CCTTATTGCG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA
CTTGGCACAT

SEO ID NO:1109: (Length of Sequence = 352 Nucleotides)

CECTOGINIG TOCCACACAA ATGITTAAGA AGICACTGCA ATGIACTCC CEGCTOTGAT GAAAAGAAGC COCTEGCACA
AAAGATTCCA GIGCCCOTGA AGAGGCTCCC TICCTCCTGT GEGCTCTCCT AGAAAACCAG CEGGACGGCC TCCCTCCTGA
TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACT CATCTCGGTG ATGCCTGTAG ATGCTAACAC TGGCCAATTC
AATGICACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTC TCCAGACAGA AGGCCCCTTG AAGCCTAGGT AGGGCAGGNT
CAGAGATACA CCCGINITTG TCTCGAAGGC TT

SEO ID NO:1110: (Length of Sequence = 218 Nucleotides)

GITTINITCA TITATINNCI CCCCATAAAA CAGIATGIAC AAGGGITIGA TICAGGGGAG AGAAAGGATA TAIGAAGACA
CATTCTICCC TCTTCIATTC TCTTACCIGG TIAGAAATAA ATAGGCATAT AGICCNGIIT ATTATGGGCA GGAAGGTAGG
TAAAGATCAC CTAAGINCIT ATGGCGIGIT GGCTITIGGCA CATGGAGAAT GAGITITIT

SEO ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTTACAAAT GGGTTTTACT GAACTTAAAC AGCTAATTGC TACATCTCTG
AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT
GTTAATCATA CCATCTAAAA AGAAAACTGT CGACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTGTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG
ACTAAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC
GTTCATTCTC CCAGCTACTT GCTAAGCACG TNCCGTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG
TCCTGCCTGC CTGCCTGGAG CTTCTATTTT CCTNATGGGA GAATGCTGCT CCATTTTGTT ATTGGAGGAA CTTTTTGCAA
GCAAAGCCTN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

SEO ID NO:1113: (Length of Sequence = 448 Nucleotides)

GOGGIACTIC CGITAGIGAT TAGAGITTIT NCCCTGCOGG AGGIGGGATA CACGGIAGCA TCATGGICGA GGAGGIACAG
AAACATTCTG TACACACCCT TGINITCAGG TCGITGAAGA GGACCCATGA CATGITTGIA GCTGATAATG GAAAACCTGI
GCCTTTAGAT GAAGAGGAGIC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGIATGG TCCTGINTTG CATATGCCTA
CTTCAAAAGA AAATCTTAAA GAGAAGGGIC CTCAGANIGC AACGGGATTC ATATGTTCAT AAACAGTACC CTGCCAATCA
AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGI TNNITTTGAC AGCAGATACT
AAGTTCCNGA GGATGCCCAG TGATCACNTG CACAGTCCTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GECCGCCAGG TGGTGCCATG NTCTTNTGIN CTGTGCGTCG GECGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACCGAGGGG ACCGCAGGGG ACCGCAGGGG CCCGGAGCGC CACTCCCTGG CTTGGCAGGC ACCATCACCT CGTGGACGGG CCCGTNATAC AGCCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTTG CGAGCTTTGA TCCTCTTGTA GACAAAGT

SEO ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGN
AGTCCTCCTG GGCCTGCCAC TCTTGGTGAT CATCACACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA
AGAAGAGGACCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

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AAGCITICTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTTAGGCA GGAANGCAGA GGTGTTTCCT TTCTGGGGCT AAAGNCTCCT TCTGACCACA CA

SEO ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCITIGGG AGGIAGGGAT CATAGITCCA CITCATIGAT GAGGAAAACT GIAGIGCAGA GATGGCATAC ACIGICCAAG
AACAIGGIGG TGGATGGAAC CCAAACCCCA ACITITGCIC CCAIGINCIC TGICCACIGG CIATGGCICT TGCCCCIGIG
TACAGATACA GGCTCIGGAC AAGITCACCA AATCCCITAG GCTTCAGCCC CCTCATCIGC AGAATAGIGG CITGGATTCC
ACCATCITCA AGGICCCTGC CAGCITINAT TIATITAAAT TIGGATTTAT TAAGCAGGAA AAAAAGIAAT GGGAGITTGI
GGGTACCAAT GGATTAAAGG GGGINAAATC TGGAGCTICG TGAGTAAAAT TAGGGTCCCC AAATCG

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AAGGACCGGG ATTCTGATGA AGCCGTGTTT CTCACTGCCT GAAGTTTCCC TTTTGGAGTTC CAAAGTAAAG GACACATAAG CAACACTTCC AAAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAT GCAGCTATGA AAAGGGAAAA AAGGGCCAG TTCTTGATTT CTTAGATACT GAAGAGGACG TAGCATTTCA TTTATCAAAAT ATAAAGGAAAA TTATTCACCA TTTTGAAGCT CACCCTAGAC TATGAAAATT ATATTCACTG CAGAGCAATT ACTTCTGTCA TTACCTGAAG TGATCAGGAT CTATCTTCCT TGTCATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCCTCACATC TGTGGTCATC ATGATT

SED ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTTCGGGA AGCTGAAGGA CCTAAACTGC CCCTTCCTCG AGGGTCTGTA
TATCACAGAG CCAAAGACAA TTCAGGAACT GCTGTGCAGC CCCTCAGAGT ACCGCTTGGA GATCCTAGAG TGGAAGTGTA
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG
AAGCTGGGCC ACGAGCTGAT GCTGGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEO ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATICAA GAGICITTAT TGAAGACTIG AGAIGGGACT TOCAACTCAG AGGAIGIGG AATOCCAGCI CAAAIGATAC
AGGAIAAACI GGGAIGGGCT AGGAIGGACA GGCIGIGGAT AIGGGAGICA IGGGICAAAG TOTITATOCCA GAIGGCITOCA
GGIACAGIGG GCITCCIGGG CIGGAAGCIG GGICCICCCC ACTICATICI GCICAAAGCI TOTIGAAGGA GCI

SEO ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAAACAA CCATACCCTT NCTTTGAGG AAAACTTACA AACTTTATAA AGAATAAACA TGAATCINCT TAGAAAGTTC
CAAGATAACA TACACAACTG ANICACCTCT TCATATATAG GCACCACCA CATAAAGATG TAGCCTAAAT CACAATCACT
TCTCACCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAAGTCT CTAATTTGGC AAAAACCTCC AAGCCTTTTA
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT
CATTT

SEO ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATIT TIGICIGIAT GICCIAGCAC IGITCAACAA CAAATTITINC TAGTICITGI TAATTITINAT TIGITATACA ATGGAAGCAC AATGITATAA GGAAAGGIAA TITTIAAGCTA ACAACCAGTG CACAGCCTCA GGITTITAAAT TACAACCACA

G

SEO ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTITITA CATCAAGIA CIACCAAGIA AAGAATITAA AAATTACTIG TCTAGTCAIG ATATATITIC CINCIGCIGC TGAAAAATCC CIGICITATT ATTICATGIN CCTITATCAT TCATTIGAIG ACACTGACAG CAACTIGCIG AACAAGITTA AGAATAGCIG ATATTIACIG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

SEO ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCAG GGAAGGCATT TTTNAAGAAA TAATAGTTGA ATTGAGATCT
GATAAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEO ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNINT CTAAGAGATG TTTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTINITGTA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTT TCCTAGGGGC CGCAAGACGG CTAATITATT ATAATTCCTC CGCCGCAGTT GCCCTCTGGC GCCA...CGC
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG
GGGCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTTTGTTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTTG TCACCATGTG CTTCCAGGNT
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAAATGCT CTAGCCCATAA GTAGTGCAAG TTTCCNTTGC
TTGAAATTTA CTGCTGATAG CCACTTGGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA
G 321

ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA
AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG
AGCTGTTTTT TTGAAAAA

SEO ID NO:1129: (Length of Sequence = 163 Nucleotides)

CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTC AACCCCAACC TTCAGAACCT GGAGGAGACA ATT

SEO ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTITITITIT TTITITITIT TTITITITIT TTITITACIGI TCAAACAGCA ATGITTAGIT GIACAACACA TAAAGICTAG
CAACAATTAC AGENCCAGIT TGAGIGICIG TTIGCTIGIT TICAATTGGG AAATTTAACT GIAATGICAC CGIAAGATTG
GCIGGGACTG GIAACATTTA AGAAACGGGT TGINCTIGCA TCCCCTAGGC GIGGGCCTCT TGCTCCATCA GGACTTGGIT
GTAGATGAAT GGCCCACAAG TCACCAGCCT TTGAGCAAGT TGIGICCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA
ATTCTATAAA GACACAGIGI NIGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

SEO ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGINCTG GTGATGGGGT TACATTTCCA TTTAAACCAG AATCCTGGAA GCCTACTGAT
ACTGAAGGIA AGAAGCAGIA TGACAGGGAG TTTCTINCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG
CCTGCCTCCT ATCAGINATG TGGTTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGGG AACTCTGGNT CCTCGAATTT
TGCCTCGAGG ACCAGACTTT ACACCAGCCT TINCTGATTT TGGAAGGCAG ACACCTGGTG GAAGAGGGGT ACCTTTTTTG
AATGTTGGGT CACGAAGATC TCAACCTGGN CAAAGAAGAG AACCCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA
CACCTG

SEO ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTITIGGIT ACTICAGGCA GGAGGGIAGA CATAGCACIT ATCIGGATIG GATGIAGCCA CAGGATIAGA ATTGITGGGT
CATAAAATAT GIACATGITC AGCITTAGIA GATCITGCCT AGAGITTAAA AAATTAAAAA TIAAAATAT TITTAAATTA
CAATAAATTC AGCTAATTIT AATTTIAGAT AATTTITATA ATGIAGITGA TCITGGITTI AACCAGAGCA TGINGCIGGA
TITTINCICCC CAATCGAACA CAGTAGAGAG AGAAGGIGGC GGGITCTIAG TGATACCATG CACTITTITT TAGAACTICA
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGG ATNGTGGIGG TCGTGAGGGA GGCAGGAGAG

SEO ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT AGACATGAAC GATTTTAACA ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGAAGAACT GGATGTTCAG CAATGCCAAG TCCCCGCCGC ACTGTGAGCT GATGGCCGGA CACCTCCGGA ACCGCATCAC GGCTNATGGG GGCACACTTC GAGCTGCGCC TGCACCT

SEO ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGICCAGGCC TGCAAGACIT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TINCCATAGG
GCTGCTGCAG TATGCCCAGG GCCCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG
CCTGTGAAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CCTAGGGAGG TATGAATGAN CTINITGCTG
GCCCAAACAC ACCTGTAGGA GGTGGCTNGA GACCCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG
TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

SEO ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCIT AAAGAGTGCI TATTCACTGA GCCTTGCCCT TNCTTACTCC TTCCTGGGAA CCCATTTGGC AACAAGTGAA GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG TAAGCCTAGC CAACAACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAAA TTGCTGACCA AAAGAATTGG GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG GATGACCCCA ATTACTTGAA CTTCTCTTAG GCCTGTTTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TTTNGGGTTG CT

SEO ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGIGOGAG CCACCACGCC CAACCCAGAA CICTITITAT TITGCAAAAT TGAAATICTA CCCATTAAAT AGCAACICIN
CTITICCCTT CTCCCCCAAG CCCITGGCAA CIGCITITCC ATTICTATGA CAATCICTAC TCTAGATACC TCATAGAGGG
TGAATCATAC AGIATITGIC CITTIATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT
ATAATTCACA AACTGCAGAA TTGAATGGIT TINAGTCTAT TCACATCGGA TATGTTTTTG AAGAGACAGT AAAACCAATC
CTTTTTTCCT TAGGITCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEO ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTITITIST ATAGACAGGG TCTTGTTATG TTGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCTTG
GCCTTCCATT CCTCTACTTT ATACCAGGGT TATTCACCAA GCTTGTCTTT GTTCAGTGTA CTTCCTCATG GAAAAACTGA
GGTGATATIT ACCCTGGTTT TTCTACCAGT GTGTAACTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTTCCA GTGATCCTCC CGCCTCAGCC TTCCAAGTAG
CTGGG

SEO ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG
AAAATGTGGG CAAGAGATAG CAAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCTNCT
TTTGTCATTT TAGAAATACA AATAAAAATG ATGATGAATG CNCTTCCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCEAGAA GCATECAAGC GGTGGCTCCA COGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAAA GAAACAAACT GTGAGAGTNA
TCGGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT
TATTGGTAAA ACTGGACAAC ATGANTGINA GCCGGAAAGG CAAAGAACTC CGTGGAAGTC AGTGCCAGTG ANGCGCTGGC
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCGAGGCCT CTCCACT

SEO ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TICTITICCT AAAAGAGTCT GAACGCATCI NATGCAACAC CCAAAAAGTAT CCCITINCIC CICGITACAG TATGITITIGG CITIGGAATA AATGATTAGI TATTGAACAA TATATGGAGA AATATCITAC AAAAGGAAGT CATTTCCATT TICTAACATC TITTACATTG CACTAATTAC ATGGITTAAA TGACTATCCC TAATCITCAT CCAACTACAC CCCATGAATT TNAGGITTAT TTAATCAACC TAGITAGACC AGATATATCC TICTAAAATC



ATTIGIAGAT AGAGGATICI CCITITIGCI AGIAAATACC ATTAACATAT TINCAGANGG CCIGGICIAG GGICATITAT TCCAGGGCCT CT

SEO ID NO:1141: (Length of Sequence = 410 Nucleotides)

GITAACCTGT GGGGGCCTCC GGGTATCCGG CGCCTGANGT TITAGCTGCG GTGGCGGGG CAGTCGGGAC CGACTNAAGA
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACTTCA
GTGAAACAAG AATGGGATAA TACCGTGACT GATCTAACCG TTCATCGGGC AACTCCTGAA GATCTGGTTAC GCCGTCATGA
AATACACAAA TCGAAGAATA GAGCATTAGT ACACTGGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA
AACCAGNAAC TTTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GCNTTCTTC TGATCAATAC CAGATGCAAA
GATGTGTTGG

SEO ID NO:1142: (Length of Sequence = 392 Nucleotides)

TITITITITI TITITITITI TITITCCNGGG ATTGAATGIC TITATTAAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT
CAATATTITI GGAAGGATTG GGGACAAGAT GICGAGTCAG AATATAATIN TCCATITCAG GGTCTCAATG TAGCTGAAGA
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG
ANITTGAAAC CTTAAAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC
CCACAGTTAG GAGCAAAGTT GTAAAGTGAG TAGGTNTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATIN GC

SEO ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTICCICIC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACCTG ANCTGAAAAC CCATTGTAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCCA GAAAATTCAG GCTAAGATTC CTGGAAAGTG GGCTGTGGGC ATTATTTAAA ACACACACA AAAATTTACC

SEO ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTCA TICCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTI AITTTTTAAG GICTITATTG
AGAGAACIT TGTTTTCIGA TATGAACTAT TGCAGATGTT TITATAAATA CITICATTAA AATGATGTAA ACAGTAGTAC
CCAACACTGT AAACTCAGTG AAAATAGTAA ATGATTCTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGFTGGCTTT
TTTTTAACCA TAGGAAGTCA TITCCCTCTA GCTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA
AATAAAAAAC TAG

SEO ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA GCAGTGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCTT ATCCCAGANT CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCCAAGGT TCAGAAACAT CTTCG

<u>SEO ID NO:1146:</u> (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCCTTG TATATTACTA
AGGTTACCAC AACTCACGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCINCCAA
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

ATTICAGIGG CCATTAAGAC CCTGAAAGIT GGCTACACAG AAAAGCAGAG GAGAGACTIC CIGGGAGAAG CAAGCATTAT
GGGACAGITT GACCACCCCA ATATCATICG ACIGGAAGGA GITGITACCA AAAGTAAGCC AGTTATGATT GINACAGAAT
ACATGGAGAA TGGITCCITG GATAGITTCC TACGIAAACA CGATGCCCAG TITACTGTCA TICAGCTAGT GGGGATGCTT
CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT
CAACAGTAAC TIGGTGTGTA AGGTTTCTAA TITCGGACTT TCGCGTGTCC TGGAGGATGA CCCAGAAGC

SEO ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAATTECT TECCATCATE AGCAGAAGCA AGCGTGACAA CAATTITNAT AGTGTAGAGA TTEGAGATTC TACATTCACA
GTCCTGAAAC GNTATCAGAA TITTAAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT
TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAAGACTAG
TTCTTATGAA ATGINTTAAT CACAAAAATA TAATTGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANITT
CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GCCTAG

SEO ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAAAA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC
AGTGGCTCAT GTCTATTATG CCAGTACTTT GGC.4GGCCAA GGCAGTAGGN TCACTTGAGG CCGGGAGTTC AGAGACCAGT
CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAAGTG TTTAACAAAT TAGCTCAGTA TGGTGGCACA TGCCTGTAGT
CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCCTGGAATT CAAGGCTGCA GTGAACTAAG ATGGTGCCAT
TGCACTCGAG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGIGIA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATINC TIGGCATCTC TCCCCTGCCC TCTCCATCCG
CATATTCATT TIGGAGITIG GAGAAGTATC TAGAATCINC TCCCACCCCA AAATGCCCCAG CAGAGCCCCC CCGCCGCCCC
CGCACCCCTT GGAGCTGCGG CTTGCTGAAT CGTTGAGATG TCTGANACTG TCGGGGTTCC CTACCTAGTG CTTCAACCAG
ATCACCTCAC TITTGAGTTT CCTTCCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGTNT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAACTGC CCCTTATGAA ACCCTCAGAT CTCGTGAGAC TTATTCACTA CCATGAAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTTGGG CAGGGACACA GCCAAACCAT ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT TTTTCCAGTT GTAAATGTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTTCAAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCITIT GAGIGACITA CITIGAGICI TIGICACCIT TCCICIGATI TITICACAIG GITTAACICA GIGIACCCAA GAGIACIAGG TGCACICAAT TCIGCTATTA ACICIATAAG CAAGINCITA AGAAAGITAA TGITAAAAAA TAATCITAAA ATIGICITGA TAGGAAAAAT GIATITGAAA TIAAAAAAAA TICITATGIT GACTICITGG TITIGAAACA ATGAATATA

SEO ID NO:1153: (Length of Sequence = 275 Nucleotides)

WO 93/16178 PCT/US93/01294

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CAACCICCIC TICAGIGICA AAAAAGCCAC GGIIAGACCA GATTCCIGCC GCCAACCIIG AIGCAGAIGA CCCICIAACA
GAIGIAIGII TIGIITCCIC CIITCATCIC TAATAATIGA TITACCAIGI TITICIAAAA TACIIGITAT GICTINCIT
TAAGAAGIGA CATATATTA IGIITAGITA CIGIIATTCA AATATAGCCC IGACCICAGI GCIAAACIIT AIAGIIGAIT
TIAAAATCAA AAGIATTATI TIGIGGGACI TIAAG

SEO ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCIT AAACCITACA ACAGITAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT
TTATATTTAT GCGCTATACA CATATATGEN CITTATCTGT ATATAAATAT GTGATGATAA TGATAAAAAGG ATAATGATTA
CACGTAGGAT AAACATTTAT CAAAAATTGT ACTATAAATA ATA

SEO ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAACAAAA CACTAAGCTA TTTTGGAACA ACIGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAAA AAAAAAAATC CCAAATAGGC ATTTTTAGGC ATTAACCAAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT CTTGATAAAAG GTATGCTTCC TTTCATTTGA MTACATTTCT GNACATGTAT GTTATAAAAT CCAGGNAACA GCCAAACCAC AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCTAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCAACAN TTATATGGTT CCATTTCATA AGG

SEO ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCATT GCCATTAAAC CTCCCAATCT TTACTGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAANC
TATCTCACAT GGTTGTAATT TGGGCCTAAA ATAAATGACT CTAGTGGTAG CATTTCATGT AGGCAGGTCC AAGGAAGACA
GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCCTTGAC GGAGCCACAG
CATGANCTCA TGTTTTCCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTTGCTTG
TAACGAGTTC CCTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGICTCA ATCCGICTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG
TGATTCTCCT GCCTCAGCCT CCCTAGTAGC TGGGACCACA GGCACTCGCC ACCGCAACCA GCCAACTTTT GTATTTGTAG
TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCCTGCCTC GGCCTCCCAA
AGTGCTGAGA TTCCGGCGTG AGCCACTTG

SEO ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTEATEAGET AATTCCACGG CAGATTITCA TITCIATCGA ATATATEATA TGEAGAAACT AGGGCCTEAA ATAATTAAGC TGACTITNCC TATEAGETAT TCCTEAAGAT AAAATTATGC TGGEGAAAAT NACTGENGAA TETCTCAAGA AATTAAGCTC TATAGAGGCA TAAGEAATCG AAAGACTITT

SEO ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACIGAC TTCCIGGGAG TGIAAGCNNC TCACCIGGAC CCCACAGCCA GIGAGCATTA GIGCITATAT TCCATCCTCC

AAAGCICTTI CITCATACCA GACCACACAT GIGGCCCAAG GAGGGATATI TACTCIGCAC TITTAGAGIT CIAGAAAACA

TIGITTAGIG GICIGGCATC ATCIATATIT ACTIGGCTIG ATTIGGGATA GAGIATAATC CIAGICCTCG ATGAAAAGAT

TITNATGAGI TAACCITATG GGGTGATGGG ATTIATGGGA TIATTICCAC CCITAAAATG ATTITGGGG GAAAAAAAGII
GIACTAATCC CITAATTIAGG

SEO ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAT CAATTAACAT GATTATCCCA GACCITTCTT TTCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC AATAACACCA TAACTACAAG CITTTATAAA AGTCCITTAT ATACAGTGT AATACAGTGA AAGNICAACC TTATTGAAAG AGGTCTGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEO ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCITTAAA ACTACITIGA ATCITATAGA AACATCAGAA TCITITGAAT TCAAAAGAAG CCAGGGACIC TAGCCAAAGT
GGAGIGGIIT TITAACICAA GGATTTAGGA CCITGGCIGA ATACAAACAT TGAATGATTA CICAGTAGGI GCCAAAGCIC
AGGACITTAG ACAGAGICAG AGICCAGIIT GINCIGAAAC ACAATTIGAT TICAACIATT GITTTAAGIG AGAGAGGAAA
GIGACATTAT TATGAGIGIA AATTINCIGC TITITAAAGIA GAAGITACIG ACAATIGA

SEO ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCITGIA TATAACIAAT GCITTGAGGG AGAAATTCAA ATGGCTATGA AAAAATATIT ATAATTCAAT GATAATAAAA ATCITACACG TTAAAACITG AGAATGTAGT TAAAGCAATA CITGGNCATA ANCITAGCAC ATAITAGTAA AGA

SEO ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATITI ATTCAGATGI TAAATGAACC AGTICAAGAA GCTGGTGGTC AAGGAGGAGG AGGIGGAGGI GGCAGTGGAGGI GAATTGCAGA AGCTGGAAGI GGTCATATGA NCTACATTCA AGTAACACCI CAGGAAAAAG AAGCTATAGA AAGGTTAAAG GCATTAGGAT TTCCTGAAGG ACTTGTGATA CAAGCGTATT TTCCTTGTNA GAAGAATGAG AATTTGGCTG CCAATTTNCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTTT TATATCTCAC ACTTCACACC AGTGCATTAC ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Seque ce = 260 Nucleotides)

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATIGGIATI TAAAAATGAA TATTAATATA AIGAAATGGN TITIGCCITIT TGIAGGCATA ATAAGCCAAA TACTITITITA
CCCAAAATAA TITINAGAGA AAATGATGTA AIGAAAAATT GIACCATGAA TIAGGAGCAT AGITTINCC ATITAAACGT
CACCATTACT TAAAAGATGA TIGATTATIG CIATACCAAA TCAGATGAAC TCIGITCATC ACTITICCINC TCIGICCCCA
AACAATTIGG TICATTCAGA CIGAAATGTT TGIGICTICA ACTIATTAGA AIGGAAGATA AIGCAGATAT TICTIGIGGGA
AATAAAATAA

SEO ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTIGGAGATG CCTTTGTCAA ATTINCCCAT TITAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANIGAAAG TAGTCATTGA
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTTTAA ACAACCACTT TTCAAAAGCA

GITGIGCATA CATTCCAAAG AATAAAATGC TAGCIACTAG GITTTGAGAA GCAGAATAAA ATATGATACI GA

SEO ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCCTCAAGA AGACAGTCAC
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTCAGAAAG AATGTCTCAA AAAAGAAAAA
AAAAGAAAAGG AGTGGGTTAA GTATCTGATG ANTTINCCAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA
AANNTGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEO ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGITTTAG TGATGATTCA GIGAGAAACA TATTIGAAGC AACAAGCACA GIGACTIGAA GCIGTAGGIA CICAATAAGT
GICAGITTCC TICCICITCI AAAAGCIGIG CITTCAAGIC AATIGIATGI CIAGAGICGC ACTGICTGGI ACAGIGGCCA
GIACIAGCCA CATATGCCTC TCAAGIACTI TAAAGAGGGC TAGTCTGAAT TGATATGIGT CATACATGIA AAATACITTA
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGIAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC
ATAAAATAAC TTACTAATAA TT

SEO ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TOCNICIGIC GOCAGGCIGG AGIGCAGIGG CACGATCITG GITCACIGCA AGCITCACCT COCAGGITCA
CACCATTCTC CIGCCICAGC CICCOGAGIA GCIGGGACCA CAGGGGCCCA CCACCAGGCC CAGCIAATIT TITATATITT
TAGIAGAGAC GGGGGITTCA COGIGITAGC CAGGATGGIC TOGATTTCCT GACCICGIGA TCCGCCCGCN TITGGIGICCC
AAAGIGCIGG GATTACAGGC GIGAGCACCA ATGCCCAGCC TTTGGAGACA CITTTGATTG CCACAACTCA GGGTAGGGAG
GGCTGGGAAA TATTACTGGT GIGTAGTGCA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEO ID NO:1170: (Length of Sequence = 422 Nucleotides)

GITTIAAAGC CICIGGACAG AGCAGIATIT CGITTAAAAC TITGITTITC TIAAAAGCIT ACAGIGITIG GCIAATICIC CICCCCTITI TACAAGACGG GGGCCGGAGG GIGGACACIG GIGGCAGGIT AAGGGATACT GICACITTAA GAAGCCIGCA GATIGAAGIG TAAACAGGA GAAATTAGGG GCIGATTITI TAAACIGIGI GAGATATTAA CCAGCCGCCC TGITATAAAA TCAGGAAATC CAAACAGCGA TITACACCGA TIAACACCCC CITTATATAT TITTIAAAA AATACACTGA GAAAATAATC AACGITTIC ATCTCICITG TCTTTTTTG TTTTTTAAAA GIGICAAAAG TCTACATNIA AATATAAAAN ATTAAAAGIT AAACTCTAGC CCTTCAGIGA GG

SEO ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT
CCCIGANTGT TGTAATAGGA AAGTCTAAAC ACACAGAAGA GCAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA
CTAATCCATA AAGAAAAGTA CCAAACTCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA
AGAAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTTAAA ANTTAGATAT CATATTCTGA TTATTGAAAT
AAAAAACTTA GTAGAAAAGC TTAACTGAAG AGGATCAAAC CTGAGGAGGA CCCCGCCAGT TTTG

SEO ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAAATCT TTTAAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT GETTTCTCTG TAGCIACACC AGCTGTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCTGGG
AGGAGTTATT GINCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAAA GTGTGCACCT
ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG
TTGGTGAGGT TTTGCTAG

SEO ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCIAAA TGAAAITTAT AAGAAAATIG TGGGITCIGC CCAAGATGAC ATCIAAATIG AAGAAGGIAC ACAGIGAGIT
TAAAGGATCA ACGAGAGAAA CTITIATTAT TCATITGCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATAIATGGA
ATACTITGAG TTGAAATGAT TAAAGGGIAA TCITIAATCA TTAATTAACA AATCATTAAT TAANCAAAAT AATAITTAGC
AAATTAAGCA AGINCIAAAG GCIACATGCA AACT

SEO ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACACTITAAT ATAAACATIT CCAGAATATA GACTGACCTI ATATCAGTAC TITINGAGAC CGTITTAAAAA
CTATATATCA TCTAAGTITA TTATAGACIG TITICATTITIC CACTITICAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT
AGATTIAACA AAGAAAAAAAT CAGITTAAGN TATITCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA
ACAACAATAA AATACCACCA ACACTAACAC AAAACCAAGG AAAGAACTGN TITIGTAACG CTIGGTAATT CTGTCCTTTA
AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TGGACACATT AGAAAGAAAC ATTITAGTIT CAATGITACC ATAAAACCAG AACGAAAAGC AGCATGCTGT
ATTIATATI'N NCAATTIAGG TTCCATTICT AACTCCACCT AAAATGAATA TGAACAAACT CATTITIAAG TGITTGTCAG
TCAAATACAA TAATAGTCTA AGTITTATTCA CATATGTACC AACCAAAGCC CAATAAAGCT AAAAGGAAGC CAAGTGTAAT
AAAAAGGCAG CTATAAGGTC TTGTGTTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC
CCACTGCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTTGGG ATTCCTGTTT
TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCICA ATCCTATCCC TITNCCICTI AGCCATCCIC TCIAATTINI TTAACCIAAG CCIGIGIGIC CTCAGAAAAT
AGGITATGCI GITGGIGIGI GIGGITGGIA ATCIATATAC ATGGAGITAT GCIATIGATI TIGITIGGIA ATCICCCITI
TTACTCAATA CTATATTIAT AAGANCONIT TAAGGGGIIG TATGCCICTA CITTATIGCI TCIGACTGCI GCATGGNATI
CCATACTCAT GICCACCACA CITACTCATI CICCCICTIG ATGGACGCIG AAGITGCIIG G

SEO ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TECCTCANCT TCCTGAGTAG CTGGGATTAC AGGIGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTTAG
TAAAGACAGG GTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCCGCCTCAG CCTCCCAAAG
TGTTGGGATT ACAGGCATGA GCCACCAAGC CCGGCAAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC
AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA
AATCTTGCAG A

SEO ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATINITG GAGAGAATAG TCATACCIAC TITAAAAGAG AATAAATIGC CTTICCIAAA INCCICTECT TCGCTCCTTT
CCIGGCGITG CTCIGGAACC TIGIGAGITA TATGIATGAT INCIGIACIC TGATATCCAT CAAAGIGCAT AACATAGTAC

TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGTNAA CATTTTGGAT TTATAACATT GGCTTATAAT ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT AAAAA

SEO ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTTCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTCAT TAGTCTTTCC
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GACCAAGGTA CATTATGACC
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTACTCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEO ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCCGAA GACCNGTCAC TACATAACTT CAAAAAATAAT CAACCACCCT CCCTTCCCAA
ACCACCCAAA TTCACTCATC CAGCGTTTAC TTTTTTGAAT CCACTCAGAA CTTTTTNCTG CGACCCCCCT CCCTAAATG
AGTTGGGTGG GGGGGAAATG AATACTGAGT TGGCCTTTAT TTTTTAAAAG ACTTTTTGAT CCAATGAGGC CCCCTAAATA
ATTGAGTTTT GGGTCCTGGT TGGTTTGTTT TATTTTGT

SEO ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA CACACAAATC ACAAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA ACCAAAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACTG ATGGNTTCTA CCAAACATTT AAGAAAGATT TAACACTAAT TCTACTCAAA CTCTTCCACA AAAAATATGA GANGAGTAGA GAAAACTTTC TAAAAATATCT TATGAGGGCA GCATTACCGT G

SEO ID NO:1182: (Length of Sequence = 345 Nucleotides)

GIGIGINIAG AGGEAIGGAC AGGAIGCIGI TIATITNCCC TITCITGGAA AIGGACCITC IGICCCITCC AITIGGACAC
CACAGIGGAA GCIGGIGGCC IGGAAGGAAG GATTAGGICA IGGACAITIG AACAGGIGCC IIGGGCAIGA IGIATÁGAIG
CAGICATATA TACCTIGCIG GGNIGGGIG CCACCICCAG IGGNCAGCIC CAGAICCAAG GAGCAGCCCC CIGGGGAIGG
ACCCCATICA TICATCAIGA CICCCAACAG TITTINATIG IGGAAGAAGA AACITINGCA TIATAGAGAC AICATCACAA
AACAGIANAA ACAAAAICAA CCCIG

SEO ID NO:1183: (Length of Sequence = 272 Mucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGCGAC CTTAATGGGA GGCCCCGGGA GGCCCAGGTT CGGTTCCTCT GTNACGAGGG TGCAGGTATC TNTGGGGAACT ACATCGATCG CTTGGACGAG CCCTTNTCCT GCTCTTATGT GCTGACCATT CG

SEO ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTITICA AACICAGITG ACTCACCICA NATITICCAT TOCAATIACA GGGOCIOGAA AGAGICAGCA CICAGCCITG CICAAGGNIC AGAITIAGGG GITGCCCCCC GNOCCOGCAA CCICOCCACCI AITGITICAA ATGICCICAA GACAATCACC ACTGITATIAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTIGAGA ACTGIGTCIA GGTGGGGTTA CITTGAACCT TAAACCACCC TIGGGNCCCA AATCIGCATG AGCAGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG ACATTITICC CAACA

SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGIGAG CAGGCGIGCG GGGGGGGAC TICTGCAGAG AAAATATITI TAAAGICATA AAACCATGAA AATAACAACT
ACTGIACGIT TIATITTATA GAAATCAAGT AGIATCIAAT AGACAAGGGA AGACATIGAT CCATAAACIT TITAAAGAAA
ATTIGGTAAT CTCTTAAAGT ATTIGIATGG CITTGAATGG GIGINCTITI CTAACITTGT TITAAATTITI ATGATACACT
TATAATIGIT TCAAATAGGC ATTIGINCAT TITAAAACTA CTAGAAGITA CACTGAAGAA AAGCATTCAA AAGAAGACTT
TTGGACAAAA AAAATTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTITICAGCC TGCNAGCCTT
CTTCCCGGGG CGCCATAAAC GCCCCCAATT TCCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTNCGTGCA CGCAGACGGG
AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGTGCTTC TCAGTTCCAA
GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT
TTGAGCACAN CAAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTTCATAGA TTT

SEO ID NO:1127: (Length of Sequence = 365 Nucleotides)

SEO ID NO:1188: (Length of Sequence = 350 Nucleotides)

AGARIGGATA AATTCAAATA ATCATAAATT ACGGTAACTT TITATTATAC CAAGGIGITC TAATGCCATC ATATGANGAC AGARICCITCA AACAACCIGC ATTAAATTAT ATTINNAATA AAATTAAAAT CTATTITTAA CCTATTITGIA GTCACAAACC GAAAACGIGI CGNCITTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGIT TAAACAGCC CTTAAAAATT CCATATATTC

SEO ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACTINC TCACTICCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTI GCACCCGGAG AGCATGIAAA GTGTCTCAAG
GGGGACATCI GAAGINCCCC GITCCCAGGG AGCCCACTGG CICCTCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT
GGGCTCCTCA TATGAAAAAN CCCAATGIAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC
GATAAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCCTG CTAAGATTTG
GGTGCATGGG GCTTCGCTTT GGTTAGCTCC CATGGTCTTC TTTTTCCAAA AAAAAAAAA AAGNCTTCAG GTT

SEO ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGIGIAAACA TICACATATI TAATAGIACC TITAAAATAA GCATTACTAC ATTTAAAATG GITCCAAAAT GAATCTATAA ATGGIAATAT AAATTAAAAA ATACGAACTI AAAGIGAATA AATTTITTAAC CITAGCTATG GIATAAATAA TGGIAAATGI ATAGIGIACC TNIGAGICAT TAAAATGICT TAAAAGATAA CAGCTIGITA CCAGAACATI AGANACCATA GCCATGATIC TCAAGCCENIA ACAATCIACA TITCENIATTI NCTIGGCCAC TGCATTCITC AAATGANIAA TAAATTTCCA GAATTCCCAT TCCCATGGIG TITTTCCCAA TAGANCTITI TCACACICGA TGITG

SEO ID NO:1191: (Length of Sequence = 303 Nucleotides)

COCGGAGAGC TECCTTCCIC TICTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC
ACCAGACATT GAATCTGCGC TCCTTGAACT TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA
AACCAACCTG TCTATGGTAT TINITGTAGC AGCCTGCAGC TCTCTATCAC TCTTGTTTAT AAGAGGCTGA AGTTTACTTT
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACAAGATGAA AGTAAACAGA ATT

SEO ID NO:1192: (Length of Sequence = 315 Nucleotides)

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTCAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT
TCTCCAAAAG CAAAACACGT AAAAGTCATT TINCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT
GCCGTTNCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCCTCAT CCTGTTCCTC
TGCTATGTCC AGCATCCTTN AGTCCCAGCT GCAGGGCCTA TATTTAAATA CCCTCATGCT TTATCGCTTT TGT

SEO ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGINATIT TNAAATCCAC GAAAGATGCC TACCITGGNT CCINCICTGG TCCTTATTAG CCACACCTCT CTTGACAGGC AGAGGAGTTA GGAGTGAGGG GATATTCCCA CCAAGACCCT ACAAATTGCA CTCTTAGGCC ATGCCCTGGG TACCCCAAACT CTAGAATTCC CTCCTCAAAG GGACCITAAC CCAACTTCAG AGCCTATATA GGCCAATTCC TTGGTCCATT TTCCAAGGGG TGGNCAAAGG ACAACCATTT TNGGGAGGGN GANGGGAGTA GGATGAAGCT TTGGNCACGT GGGTCTTGGG CAAATCCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TITTITTGAA ATGGAGTCTC GCTCTGINNC CCAGGCTGGA TTGCAATINC NOGATCTCAA CCCACTGCAA CCTCCGCCTC CGGGGTTCGA GCGATTCTCC TGCCTCANCC TCCTGAGTAG CTGGGGACTAC AGGTGCGCGC CACCATGCCC AACTAATTTT GGTATTTTTA GAGACAGGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEO ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATECTIGE CICAGGGCCI GEGGCGGGT CCIGGGIAGA GICCIAGCCC CAGAGCCCCA GCCCCICATG TCCIGCCGCC
CCICACTGAC CAGACGATGA TCGGNAACCI CITGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATINCCAA
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA
CGAGAAGAAG CCAAGAGCTI NACCCCAAAG CAGTGCGCGG TTGTTTGAGT T

SEO ID NO:1197: (Length of Sequence = 303 Nucleotides)

CITCATATIT TTATAGCIGG GGICAAAATA TGCAATITAA AAATAAATAT ATCCATTINC CIATTCTTAC ATTTATGAAT ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT TANITTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEO ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTICI TCTCATCIIT TINATGCTAT TATIGICATA TAAGITACAT TCCTATACAT TGTGIGICCA ACACAAATTI
AAAATTATGC CATIGICTCI TAAGICATAG AACAAAAGAG ATACAAACAA AACATACATI TATCCTGTCT TITATATTIG
CCTATGCAGT TACCTITACC AGTGTTCCIT ATTTCINCAT GTGGATCTGA GTTACTGTCT TINAACTTCA ATCTAAAGNN
CTTTCAGTCT GAAAGACTGT AATTTNAATT TCTNGTAGGG GTAGGTTAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEO ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCIAGITATI CIGAGAACIA CAACCAAGAA AAGAGGGAAG CACCGGGITG GCCAAGGCCA TCCGGAGACI TGICCIGCIG GGICATITAA AAAGCIITIC TAGGATAACG TIGGCTITCC AAGIGGTITI CCAAGCIGAT GICTITCCCA CIGAGGAGAA GCIGTAGGCC TGIGGACIGC CAGGIAGGAG GAGGITGAGG TITAGAGGAA AGAGGAGAGC AGGAATGGGI TGITINCAGI GGGGCIGITC CCATGGACIC ACCAAGAAGA AATCGAGGIG CIGATGGGCC TGCACAAGIG CITATCAGAA ACAGCIGIAA CAAGIT

SEO ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT
CACATAGGTG CATAAATAAA TGAAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TNTTTTNCTA
CTTTTNATTT TTNATAATTC CTCCAGTGTG TTGGTGTTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA
AACCCCCCAA ATCTAGTGGA TTAAAAACAAA ACCATCTTAC AATTTTNNTC AGAACTGTCT AAGGCTGGAT ATTTTACTGG
GCTCTCTCCT GAATGTGGGG G

SEO ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTINITA CCCIGCTAGC AATAGCTCTC AGITTCAGAG GCACAGTCTT TEGAGACCAT TCAGCACTGA GAAAGCAATA
TTTAGAACCT ATTGCAAAAC TEGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG
AAACCCTTCA ACCTCAACTA TGCCTTCATA GACACCACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEO ID NO:1202: (Length of Sequence = 344 Mucleotides)

GGAAAATAGC CAGACIGGET ATTATGCATG TAACAAATGA GGACATTGIG CATAAGAAAG GAAACATTAG TTTTCTGTCA
TCCIGGGCCA AGIACCTCAT TACAGTAAAT GTGIGTCTTT GGAAACTCIT TGCTTGINCT GATGGCGGTA AGCATGGGGT
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTC TCATGGGATA
AGITTCCCAA AGCTTGAATT ACAGGCTATG AAATAAAGCA AATAGATGGA GGAGAAAACA AGIATTGTTT TCAAAAAGGT
ACCAAGTCAA TTCTATTTAA AGGA

SEO ID NO:1203: (Length of Sequence = 370 Nucleotides)

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCCT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT
GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCGGG CGTGGTGGCG
CATGCCTGTA GTCCCAGCTA CTTGGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT
GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAAA CAAAAAACAA AAACCTGCCT
TCTMGGGATT GGGCTTCTGG GTTTTT

SEO ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTIGAGCA CACGCGTIACA CCCAGACATC TICGGGCTGC TATIGGATIG ACTITIGAAGG TICTGTGTGG GICGCCGTGG CIGCATGTIT GANICAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATTGTT GITATTTTTT TITTTCTCTC TCTCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CIGATCGGGT CITCCTTCAT CAGGAACGAA TGCAGGAATT TGGGAACTGA GCTGTGCAAG TCCTGAAGAA GGAGATTTGT TT

SEO ID NO:1206: (Length of Sequence = 336 Nucleotides)

SEO ID NO:1207: (Length of Sequence = 319 Nucleotides)

TECCTCANCC TCCAGAGIAA CTGGGATIAC AGGCGCCGC CGCCACGCCT GGCTAATITT TGTATTITIA GIAGAGATGG
GATTITNCCA TGTTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG
ATTACAGGCA TGAGCCACTG CGCCTGCCTC CATTTCCTTT TTATAATTCA TCCCTGAACT CCCTTAAGGT AGAGAAGCTG
TTTGATCGTC CCAGCCCCTG GGAGGCTGAA AGGTAACTIN ACCAGCTCCA TGCCTGAGTT TAGCACCTGC TGTGCCAGG

SEO ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGITTA AAAATGAAGT GGAAGTITIT TGITTITGIT TIGITTITGC AGAAAAAAGA TITTIAATGG CITGAATGIN
CIGCCATAGI TGCGICAGAT TGICAGAAAA TIATGITGIA CATCTGAGAG AGAAAAGAAG AGCCITITGA GGAGCTGCGC
TAAAAATTATI TITTGITTAG TCTCTTAACT CITTGGCTTG AATGAGTCAT TGACTTTCCT TGCCAAGATA GGGITAGCAT
TTGITTTIGG TTTTAAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTTCTAGA
AATTGIGTIT ACCAGTTGIT TTAGTCTGAA TGTGATT

SEO ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCIGCT CCACCCAAG AAATCAGACA AAGTAAAATT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT
TAAGCATITA CTATTAACCA AAGAGTIGIG TTCACATICC AGATAAGTCT ACGIGGAAAA GCATTCAGAA TITACTAGGT
TITTINCTACA TCACTATTIC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA
TACATTTAAC AGGGNCAAAC ATCAGTGACT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT
CTTGGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEO ID NO:1210: (Length of Sequence = 349 Nucleotides)

GAGAAGATAG TAGAGAAAGT CAGCGITACA CAAAGGAGAA CCAGGAGAG TGCCTCTTTT GCCGCAGCTA CCACTTCCCC
TACTCCCAGA ACTACAAGAG GTCGIAGGAA GAGIGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG
CACCAGTCCA GAAAGCTAAG TGIGAAGAGA AAGAGACTCT GACCTGIGAG AAGTGCCCCA GGGTATITAA CACTCGCTGG
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTTGIGA TAAATGIGGC AAGAAGTTTT TCCTGGGAAG
TGAGCTGTCC CTTCACCAGC AAACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TITITITITI TITITICAGG GAAGAGCITI ATTGCTTCCA TGGGGTGGC CTGGGACGGC TGCCACAGCT TGGGTAAGCT CCTTGGGCC CANITCCCIT TGGTCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGINT TGTTGCTGAA ACCTAGAACA TGTGGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCCAGCAGGC GGANTGGGCG TCACCCTCCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGGCGGTCT TGTTGGCTCC GAAGGAATGG GCTCCAGGGT TTCCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TEGTATTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTCA
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAGCA TTCTAAAAAAT AAATTCTATT GGTAAATTAG
GATATCAGAT GCTTCCATTA TAAAAGCCCTA TCCTATTCTG TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GGNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GACNCAGGAA
GAGGCAGAAT TGCCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEO ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTG TATTTTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAAA CTCCTGACCT CGGATGATCC ACCCGCCTCG GCCTCCCAAA GTGTTGGGAT TATAGGCATG AGCCACTGTG CCCGGTTACT TTTTCCTTTT TTAAAACACT GAAATTGCTG TATCTACCAC ATTAACATTT TATTTAAAAA AATTTGTTAA ATAGCATATG TATGTAAATT TAATATTAAT ATACCTCTTT TTTTGTCCTT CTTTAGGTGG TTGGAGCCTA GGGATACTTA CTTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CIAATITINC AGACAGGITI ACATGIAAAA GGCTAGGIAT TIAGCCACCT CAGCATTGAT TAGITITGGA TGICTAAGCT CTGTTACACA TGGCTICCCA TGGCTICACT CTACAAAACA TATTINCAAC GTGAAGGNIA CATCTACAAG AAATCIACAT TICAAGGGIT TIACAAAATCA ATCITGIATC TITCCCCTGA ATTGACTCTC ACAGACCCCG TCCCCTTGIN ATTNCCTTTG CCCAGCTTAA CGGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGITAAG ATTGGGCAAC AGATTTACAG TICCTGT

SEO ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGIATI AAACAACIAT TCTTGTACTI GANITAAAAA AAAATCAAGC TGGGIGCAAT TGCTCATGGC TGIAATCCCA
ACACTITGCT AGGGITAAGI GAGAGGITCA GCCCAGAAGI TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA
CAAAAAAAAAT GAAGAAATTA GCTGGGIATG GTIGCATGIN CTGTGGNCCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEO ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCATTTACC TCCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGTGTATGA CTCTCTTCTT TGTAAATGTC ATATGTAGGG TTCTGTACAC AGGACATTTT CTTCATTGTA GTTCCTCAGA TGCATTGAGC TCTCCTGAAT GACTTAGCGG

GGAAGCTCAG TTGCAGCTGA COGTATTAAG GGTCCTCTCC CATTGTGCTG TGCCCGGTCG TTAGCGTAGG ATTCNTGCCC CACGGCCCTT CCTGTTTTCT AAGGGCTTGG CTTT

SEO ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTTGCTTGTT GTAAACAGCT GGCAGTGGTT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGTG
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCINITTAAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA
ATAAATTACA CAATTTTATT GGAAAACTGA AGGTGTTCAA CCAATGCTAG TTTTTAAATA TATTTAGAAA TACTATTTCA
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEO ID NO:1218: (Length of Sequence = 281 Nucleotides)

GITGCOCAGG CIGCAGTGCA CITGIGCAAA CGCGGCTCAC TGCAGCCCCA ATCICCCACT CITAAGCAAT CCTCCCACCT CAGCCTCCTG AATAGCTGGG ATTACAGGTG TGCACTGCCA CACCCAGCTA ATTACTTTAA TITGITYTTAT TTTTAGTAGA GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAACTG CTGGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAACTG CTGGGGTTAC AGACGTGAGC CACCATGCCT GGGCCTGCTC A

SEO ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTTCTCTC CCTCCTTCCC TITATTGGCA CTGCCCGGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC
ATGGAAACGG TTGGGGATCC ACAGGAACGA CATTCATACA GGGACATTIN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTTGGCTGG TTCTCATTTT AAGGGGTAAG CAGTTTGCTA T

SEO ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGICACTCAG AAACTTACTT TGCTTACAGC CTCATTATTG TTTTTTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT
TTGCCTTAAA TTTNCTAATT TTCCTGGCCA TTGCTTTCCT GTGATTTGAA AATGTTACGG TAAGTGCTTA GTTTGGAAAC
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTTG TTTTGATATG ACGGATATAT
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC
AATGTCAAG

SEO ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CITTGICCIC ATGAATAAAT TAGTTAGTAG AATCTAATTI CITAGATCCIT CATAATGGIA ATTGAGGGIA
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGI
AATCCIGTCA CACTTGCAAA CACATAGAAG CAACAAGACT ATTTCCTCTC ACACTTTTAA TTAAAATAGT GCCTGAGTAG
ACTTCCAGGG TAAGGTTCAG AAATTTNCTT TCTAATTTCC CTGTTTTAAT GACCACTACT TTTAAAGCTA TGCTGGGAAT
TCACTTTCAC ATATATCTAA CTTACAGGAA ATTTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEO ID NO:1222: (Length of Sequence = 350 Nucleotides)

GEATTINITI CIGGGIACIC TICATGGCCI GCIAGAGAAC TITACIAAAT TATAGICCAG TAGCIGGACA GAGCIGCATG
TGIATIGICI AAGICCACCI GIGCIGCIGG TCAAGATTAT TITGCAGIGT TIGGIGGIGT TGAAGAGGAA TACIGITGIG
AAGGCIGAGI CAACIGCATG ACAAINCICA TGGCICACIG GCIGATGAGI TGIGGCATGA CIAGAAAGCI CIGCITGIAT
TCCCAGATGA CAAGICACAC CIGAACAGCI GGATACIACI CGCATCCAAT TIGCITCCAA GITAACATAT TINCAGAAAA
TATITGGATT TGGAGIACAT ACAAATATIT

SEO ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTITATCT ATAGGCCAAG TITAATGACAT AACTACAAAG AAATGACTIG TITCACATGT TITAAACCAG
TGITTIGGCT ATACTAACIT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TITAATAGICA
ATTTIGIAGT TGTAATATTA CTATCGATCA TITTGTAACT CICCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTIT
NTTAATGITG TTAGGAACCA AGGCTATCAG TGTAAAATGA AGGAGTTACA AGCATAAGAT TGANAGACG TAAGTAAAAA
GCTCATTAGT ATAGTTCCAA GTTTAACTIG TCAGGGATGA GCTCATGATT

SEO ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GECCIGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGITATTGAG AAAGATAAGN TTIGGCCIGC NGGCCTITGA CAGIGAAAGG NINIAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGIGAAGCC AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGINAGIGI GGIACCCAGC GIGGGAAACC GIGCTTITIN CCATGGNACT NIGCAACCCA
CGGATIAGAA GATCCCACTC AGGAACCCAC GNCACTGGNA CCTAGAATGC CAACCCCAGA GCTGCACAGA TICIAAACAA
CCICTCANCT GGAATCIGCC TAACCCTGCA GAGCTCCIGC GGGGAGGGGI GACCAGIGCC ACANCIGCTG CIGCCIGCTG
CCTAAGCCAT TITAA

CAAAAAGITA G.LAAACATG TAAACGIAAG TNATGAGGIA TITCATAGAT ACAGIGCCCA TACAAATNCT CITTCCCACA
ATTITCAACI GCCAGATCTC TIGCITTAGI CITTITNCCT TATATITGGA GAAACAGAAG AGIITGACAT AAAAGICCCI
TTGAGGATGI GAGGGITGCA GIAGIITTACA GCAGGGICAG AAAATGAAAG TAATAAAGCA ATATITACAT GITTITGIAT
AAGACCAAAA ATATITCCIT AAAAAGIIGI TAAAAGIITI TIAGICCTAT AAACACICAC TITITATAGGG CACATGAITG
TCTGIGIGAC TICTCTITCC AGAGGAGGAC TIT

SEQ ID NO:1227: (Length of Sequence = 352 Mucleotides)

GECATCTGIT TITTIGITTG TITTGAGATA GAGTCTCACT CIGICGCCAG GCIGGAGIGC AGIGGCGIGA TCTCGGCTCA
CTGCAATCIT TGCCTCCCGG GITCAAGCGA TICTCCTGCC TCAGCCTCCC AAGIAGCTGG GAGGIGIGCA CGCCACCACA
CCCCGGIAAT TITTGIATTT TITGIAGAGA TGGGGITTCA CCATATTGGC AAGGATGGTC TCAATTTCCT GCGCTTGIGA
ATCCGCCCGC CTCAGCCTCC CCAAGIGCTG GGATTCCAGG CGIGACCACG GCGCCCGGCC GGNATCTGTA GATTTTAAAA
GGCCCCAGIG GITCINATGC ACACCCCCAG AG

SEO ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGITITICCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTTG
TTGGTCAGCA CGGTCAAAAC TTCAGAAGAA TCTTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCCAGGG CAGTAACAGC
TTCCAGTGTT GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACTGT GGCCTGTAGC CATCTTTCTC TTTTAGTACG
ATCCCACCTG TCAGACTTCT TGAATTTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTCACGNTGT TTATTTTTTGT
CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGGA GCCAGGTACT GATCTCTCTT CAGCAGG

SEO ID NO:1229: (Length of Sequence = 366 Nucleotides)

CTGATAAGGA GGTAATTTCA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAACC
TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG
GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC
CTATGTGGGG GACTTCATCA CCCCTGCCAA CTTTNAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC
TGATCAATGT TGGGGTCATC TACGAGGTAG CTGACCGTCT GGGTAT

SEO ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTIGGAGAA AGCCCIATGA ATGITITIGAG TGIGGGAAAT CGITTIGCTG GAGCACAAAC CTCATTCGAC ATGCCATTAT
CCACACTGGA GAGAAGCCCT ATAAATGIAG TGAATGIGGA AAGGCCITCA GICGCAGCTC GTCCCTCACT CAGCATCAAA
GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGGAAGACCT TTTACAAGTG GACAAACCTC AGITACCCTT
CGAGAACTIN TTTTAGGGAA GGACTITTTG AATGIAACCA CTGAGGCAAA TATTITTCCA GAGGNAACAT CTTCCTCTGC
ATCTGATCAA CCATACCAAA GAG

SEO ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCCCCGG GCAGCITGGA GAAGGCGCAA TACTCTCCAG CTCCACCGIT ACTTCAGCAT GGCTGGGGAG GCCTTGGAAA ACTTATAATC ATGGTGGAAG AGGAAGCAAA CATGTCCTTC TTCACATGAC GGCAGGAAGG AGAAGTGCTG AGCAAAGGGA GGAAAGCCCC TTATAAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT AANTTACCTC CCATGGGCTC CCTCCCGCAA GACGTGGAGA TTATGGAAAC TACAACTCAA GATGAGATTT NGGTGGGGAC ATTAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTTAT ATTACTTTAG GTATATAGCC AGTATTGGGA ATTGCT

SEO ID NO:1232: (Length of Sequence = 380 Nucleotides)

SEO ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGITT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGITCCAGT GACTCTGGAT
TTGGTTCTAA TTTTAATGCA ACTTCTTGAT TGAGTGCAGG GTCAGCACTA CTTCGAAGTG GCTTTGGCGT TTCANCGGTG
GGTAATGGAG ACATTGCCAA ATTTATATTC TGTAATTTIN CGTTGGGTGA GGGGAGCATT ACATCATTAT ATAATGGTAC
TTCCTCAAGT TGCTGGTCAT CAGTTTCTGT GTCGTTGCTG CCAAAATCTA AAGATATGAT TGINTCTCCA GCGGCTGGGG
CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEO ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATTGITTGA CITTITGACT CAACAATTIT TTTAAAACTT TTTGITTITT NCTGAAACGT
TCITGITGIT ATGAGCCTTT TGITTTGINC TCGITAAATG CACTCGACCC AAAATTGGIT TGGCATATCG AAAAGGAGAC
CAAGGAGGGA GGGCTGGGG CGTGGGGAGGT GGGGAGGAGG CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA
TAGAGACAGC CAGAAAGACA TGGGGAAAGA GTGTTGGAGA CAGAGAAAGG GGAAAGCCAA AAG

SEO ID NO:1235: (Length of Sequence = 386 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TIGINCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC
CCCACACCAG CCTTGGTGCC ACCAAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTTGTAT TTTTAGTAGA
CACGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAAT GATCTGCCCA CCTTTG

SEO ID NO: 1236: (Length of Sequence = 401 Nucleotides)

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CINCTCTICA GICGGATTAT AGAGTIGGAG CAAATGICAT GATGANCTIT NAGGCCTAGG CCIGGNCTCT
TGAGGTGIGT GIGTGIGTG GIGTGIGTGT GIGTGIGTGT TTCTTTCTCC ATAATAGTCC CAACCCTAAA CAGGGGTATG
GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT
TTTGGCCTGT CTGTATGATG TTTAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA
TAAGAGTTTA AATTAATAGT TINCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GEACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAAAATAA GCTAGAAAGA TGAAAGCTAA AAATTCTATT
TGAACTATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTINC CAGGGGAACT
GCAGAAGTTG AGACCCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA
ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGITATAACT GGCACITTAA TITGITITIG GAACTAGAAT TIAGGGGCAG TIGGATGAAA TIGCAAATIT AGAAGGGGAA
TAAGAATITC CTAGIGCTAT ATAAAGAAAT GAIGATGGAG ACAAAAGCCI TGCITICCIC TITITAGAAT TIATITINCGA
TITINAGCAT ACTGIGGGGC TITITAGAGCT AATATGATCT AAATNCAGAA AATITAATIT TCATAGIAGG CCAGGIGIGA
ATIACITATG TITGCIATAG AATGCITATT TAGACTAACA ATAAATITAC TITGCITTCT AAGGCCAGIC AGCGAATGIG
GGGATGAGGC AGGATGITTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCIT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCGACAGAG CAAGACTCCG TCTCAAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA
ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCCTCTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG
AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA
CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT
ACTCCAGTCT CAGGCCCCTG TTTTTAGCGG GAAGTCACAA GGAGG

SEO ID NO:1241: (Length of Sequence = 350 Nucleotides)

GEGGAGGEG TAGGETCTEC NCTETCTETN AGGEGCTTET GECTTGEGG GTGGECTTTE CATGETCTCG CCTCTTGAGT
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCCTGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA
GGGGAAAAGGG AACCGCCCAT ATGTNCTTCA CGTGCTGCAA GGGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT
TGGGATGGGT ATGACTCGTG GGTCACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEO ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACCAG TGAGGITAAG TATTGAACAG ATATTTAAAA GCIATAAGCT TITAAACAGA ATAGGCATAT TGCTGATACC
AGTATTTGAC AACCGCCTTG TTTTTTCAGA TAAGAAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA
CTTCGTGGTA GTCAGGTCGG AGGTCACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCAGTAAA
CTCTTGAATG AATGAAAGAA AGAACAATA CTGTTGACTT TTGAACTTGA ATCTAAACAA AACCTATGTT GAACTTTAAG
TCTGTAATCT AAGAACTATC AAACTTAAAC TTGTTACAAA AGGNGGTGAT GAGCACAACC ACTTTCTTTT GG

SEO ID NO:1243: (Length of Sequence = 377 Nucleotides)

GIGGGGCAGG CGTGAGGIAG GGGTGGGGIG GGGATGACAG TCAACACAGC TIGGACCAGA AGCCCATGGC GCCIGGNICC CIGGAAAGGC ACAGGCCACA GACGGATGCC GCCTTINITG CIGGGACACT CCIGCCACCA TCCACAGCTC CCCCGTCACT CCACGGITCIT GIACTICGIG AACAGGITGI AAAGAACCCI CAGGGIGGAT TINAGGICCA AGITAACCAC GICTICAGGA CGACCCTTGG GITTNITINAG GCCTCCGICC AGCATCAGCT CAAAGGCGAA GGACACATIN TGGACCTTCT GATCGAAGCT TTCCGGAGTC AGGTAGAAGT GGIGGAGAGG AACAAAGTAG TCTTCCAGAA GGCCCAT

SEO ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTITINCAT CAATGITCAT CAAGGATAIT GGICIAAAAT NCICITITIC AGIIGGGICT CIGCCAGGCI TIGGIATCAG
GATGATGCIG GCCCACATAAA ATGAGTIAGG GAGGATTCCC TCTITINCIA TIGATIGGAA TAGIITCAGA AGGAATGGIA
CCAGCTCCIC CTIGIACCIC TGGIAGAAIT CGGCIGIGAA TCCATCIGGI CCIGGACITT TITITCGIIG GIAAGCIATT
GATTAITGCC TCAATTTCAG AGCCIGIIGI AGGICIATIC AGAGATTCAA CTICITCCIG TITIAGICIT GG

SEO ID NO:1245: (Length of Sequence = 320 Nucleotides)

GEAGATOGIG CACATOCAGG COGGCCAGTG COGCAACCAG ATOGGGGCCA AGITCTGGGA AGTCATCAGT GATGAGCATG
GCATOGACCC CAGCGGCAAC TACGIGGGCG ACTCGGACTT GCAGCTGGAG COGGATCAGCG TCTACTACAA CGAGGCCTCT
TCTCACAAGT ACGIGCCTCG AGCCATTCTG GTGGACCTGG AACCCGGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG
ACATCTCTTC AGGCCTGACA ATTTCATCTT TGGTCAGAGT NGGGCCGGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEO ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTITTTTTT TTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC GAGGCCCATAA ATACTGCAGG AGGGCGCAAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC GGGGGTTTAG ACACTGCTGG CTTCGGCCCC GGCCG

SEO ID NO:1247: (Length of Sequence = 384 Nucleotides)

GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTITTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG
CCTTTNAGAG TCTTTACCAA GATAAATTTC CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT
GACGACAACG TGTTTGTGGG GGCCCCCACG GGCAGCGGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC
TGCAGAGCTC GGAGGGNCCC TGTGTGTACA TCACCCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA
GAAGTTNCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTTGGAGA AGATAGAAGT TTGAAGTGGA AAACTGGAAG ACAGAAGCAC GGGAAGGCGA AGAAAAGAAT AGAGAAGATA GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEO ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CIATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CITATGTACA CCAATAATAA AGTAAGAAAG GIAAAAAAAT TCATGTAATA AGAAAAAAAT ACAACCCAGA AATTTAAGAN TTAAGTAGTA GICAAATCTA ATTGGAATAA CTCACCTATA TAAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC CAGAAGANTG TTTATCTCCA CAGCATCAA CCTAGTGTCA TGCACCAGGT TGGGACTCAG CCACTGTTGC CTGATTGATT ATGAAGNCAG TCACTGTGAT CAACCCCAACA GIAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TITNATITAC ACTGCACACC TIGCAGCATC CITACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTIN
ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTCATGTG CATGINCCGA GAAAAAGGGG AGCTTCTAAA ACATGTGCGC
AAACCACACG AAACAGTGCA ATCCTGTGTG TCTCCTATTC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTCG
TGGCTTTCTG GCTTACAAGT TCCAGTGCCT ACTCCCATTC CCTCAGAGGT TTGCTGTGAT CACTGAGGGC AAGCAGAATG
GAGCATCGTG TGGTCCTTAC TGGAGGACTC CTTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEO ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCIN CACACCTTGT GAAACCTTTC CAGGACCTCC CAGTCAGAGG CCGTCTGGTT CTCACTGTCT GCAGAGGGCCC CTACAGGCTG TCTGTGGGTG AGGGGTGTCTG TNAACTCTTG TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTTTTCT ATACACCTTG GAATCCTGAG TCCACAGAAC AGAGGCTCAT ACAAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTTCT

SEO ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACCAGTTA TGCAAAAACA AGAGTACAAA ATGCCCCTTT CTGAAGCTCA GTTTGAGAAA CTGATTTCGN
ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC
TGAAATCATC TTCGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTCACAG AGATAAAACA
GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTTNGAACAT ACTTTTTAAA CATAAAATCA CAGTCAAGGC
AGTGATAGCA TTGCATACTC AGTGCATTAT TTCATGTAGT GCCTTCC

SEO ID NO:1253: (Length of Sequence = 393 Nucleotides)

TIGCTITCAA GACAACACIC AGIIGCIAAA CCCATITCCI TITCTITAGG ATATITICAT TGICICCGAA TITTAGAGCI GAAAAGIGCC TIAGAGATCA TCTAGIICAA CCICTCCGIT CAAATGGAGA ACCIGAGCCA CTAAGNITCA CAGGNGAGIA AGATAATIGA GCAAACAACI CCAAGIAATG ACAGAAAATT ATAGGAGAAT CAGIACAAAC TGIGAGAATT TACTATGITG TIAGCATCCI AAGIATGAGI TIAGAAAAGG TAGAAGITAT AAGAAAAGIT AAATTGITIT AATATGAATG GGATTCCACT GITACCTTCA NGNIAAAATG GAGACATACT TITTNCTITA GGTATTATAG TIAAACGAAT ATTGIATCCN GIG

SEO ID NO:1254: (Length of Sequence = 377 Nucleotides)

4

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTINCTITAA GICATCAGTA TGGGATGICA GCAGAACAAA AATIAAAAAG
ATTAATTINC CITTIGATCI AAAACITCCI TAGIITGAGC AGIAGGIGCI ACAAAATTAT TIACATATCI TAGIATCATA
GITAAATGIA ATGIGITTAG GAGAGGAAAA CAAAAGATAC ATTINCTITA AATICATTAA GAAATTITCA AATICACITI
GIAGCCCATG CICNATAGAA TIGGGCIGIG TIGGIACATI TGAAACACTG TITATGITGC TIGAAACACT TATIINITTA
ATCGCCGATG TGATGATGCC TATGCCCGAG ATCANATATA GCTAGATIGG CIAGGCT

SEO ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGITA GCITTCICIG GCCTAGAAAA AGAATAGGNI CATCAAGICA TAAAACGAAG TAIGINATIT CAGCACCICC ACAAAATGGC TICATCAAAA AAGAAAATCC CATCACATGI TACCICCCC CICTAGGTIC TICAGCIGGG GCITIGCCIG CCCCICTACC TAIGGCAGAA CCCACTGACT CGIGGNCIIT CCAGCACTIC CACTTGCCTC CATTAGACAC TITAACCCCGC TENCOGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCINCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCCTGA GACACCTTCA TGTGACAGGT GTCCCACFTT
ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTC TCAGTTCCCC CCAGTTCAAG
ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAAACTAAA CATAGAAATA
TACGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTCACAT AAAACTTACA TTAAATAAAT TTGTATGTCT
CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTINAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG INCAGTGGCG INATCTTGGT TCACTGCAAC CCCTGCCINC NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCCG

<u>SEO ID NO:1258:</u> (Length of Sequence = 329 Nucleotides)

CAGGGGTTC TITCCCTACC CITTGIGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAAT CIGGGCTGAG CCAAAGTCCC TITTGGAAAAT ACAAGCCATA ACATTCGAAG GACATCAGCG ACCITGGCTT GITTAGGTGA TITTNCTTCC AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCCTTGTG TAGGTGGGGA AGAGCACTTC TAATGTTAAG TGGGGTACAG NICAGCTGCC CCCCCACGTA GCCTGGACAT CGTCTTNTCC CCATAATCCT TNNCATCCCT ACAAGGTCC

SEO ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGICATATGI TACATGCATG TITGINCAAT ATGIGIATGI CAGGNCCATC TICACAAATT TNCATAGCCC CITCIGIGAT CIGITAAATA GGIATATTTA GCCAACCCTC TCAGCATAAA GCTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCCIGCATC

TECTCTTEGC TEGGAGCTCG CTTCCCAGCC TETAGGATEG CCACCTTGAA GGCTGTAACC CTTTAGAAGA AATAAAGTCT CCTTTTCTAA ATTTATAGAT TETATGATTG TTTTAAGCTA ACAATAGCAA TEGCATTATC ACCTCACTTT CTETETEGT GCTTAGCATA GTACCTGACA CATEGCACTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTCATAGCG TTCCCTTGAT
TGCNCTATGA AACTGAGTAA AGTITCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTC TGTCATATCT CACCAACAAT CCTGGTTTCT
ACAGTACATC AATTTTAAGT AATGGCCAA ATCATGGCAG CAAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG
NAAAACAGGN GTTTCAAATC ATCTTCTTCA TTT

SEO ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAAACAGA CAGCTAAGAT TATAGGAATA TTITAAATAA ACAGCATITA TITTAGACAC ATTTCAAATA GAAGCCACAA
TAATCAAATA GATATTATCT GAAAACGTTT CAAAAATATT AACCCTITAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT
TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEO ID NO:1262: (Length of Sequence = 292 Nucleotides)

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGITGAGGIT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCC CAGCITTAGT GGAATCTGT GAAACACCTG
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTTGTAGGT GGCTCTGAAC
CTAACTATTC CCCAAAGATT CCCAAAGGAG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGCGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG
GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCC TGGAGCAGAG
GTTCAACCGC GAGCGCCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNCTGG AGCATCAAGC CGACTTNCAG ATCTACTCGG
AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CIT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTICTATGIG TAAGAGAAAA TAGAGATGGG TATACATACT GITGITITIT TIGAGCCGAG AAACIGTIGI ACCGGGGCCT CAGGIGGIGG GCATTGGGG CTCCTCTTGC AGATGCCCAT TGGCATCACC GGTGCAGCCA TIGGIGGCAG CGGTACCNG TCCTTTNTTG TTCAACATAG GGTAGGTGGC AGCCACGGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTINT MITCCAGGAG CATMIGGTC TTTGGCGGGA CCCACGCAGC CCTGAGGATT

<u>SEO ID NO:1266:</u> (Length of Sequence = 322 Nucleotides)

CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA
TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA
TTGGCCTGGA TGAGCTCGTC CTTGGAGTTN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT
GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG
TT

SEO ID NO:1267: (Length of Sequence = 310 Nucleotides)

GIAACCCATC CCATAGGGIT GINCIATGIA TICTIGCCAG GIGGGGITGG AGCACCTTGI GAGCICAGCA GCCCAACATC
GATAGIAAGG GAGTCAGGGI TICTICATCI TCCCIAGAGI TAGAACTCAC TICTACAGCC ACIGIGICAG GGACCACTIT
GAGCGCCCTT GGCACCIGCI GGCIGGAAAT CAATITAGCI GIAATGGATC TGGCCCAGCI TITCCICTCI TGGGICATCI
GCACTCATAG TGGITGAAGC AAGATCIACC AGATGGGGAC ATTGAGATGG TCCCTTTCTC CITCTCATTI

SEO ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCIGCTCG TGAGGATGGG ACAGCATTGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG
AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT
TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTTNACTAT TATAATGAGC AAAGGTTCAG
TCTGAGGACA GGTAAAATCA AAAATGTGCA CCCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA
CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTCAGG GTCTGCAGCA TGTTGTTAAG GCCATTAAGC ATATGTTAAG GCCATTAAGA GCAGTAATTA
TAAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACTTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT
ACAAATGANC TTAGCAGCTA AGNAAAATGT CTGCCTGCTT ATAAACTAAA TATGGTATAA TTATATATTN CTNTTATGTA
TTTCTAAAGC TACATTTTCA CCCTAACTCT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACTT
CAAATATAAT CAAATATAT

GATAAGIGAG ACTAATGGAA TOGITTCCCT CTAACTTCAT AAAAACTTTA AGGATTATCT TICTIGAGIT CTCTGTATIT
CTGTTTTAGA AGAAAAGAAC AAAATTTCAG AAACAAGATT ATAGTGCTTT TNCTAAAGTA TAAATACGTG GGCCCTATAC
AAACTGGCAA ATTCATTAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA
ATCATTTCAT TCTGAGCGTG GGAATCGGCA TTGGTTAACG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG
AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEO ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCTCTGG CTTGTTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT
ACTGATATTA ATCAGTTTAG TTGGATTAAG ATGAACAATG TTTAATGCTT TAAGGNTCAT TTTTTTGCCCC AACAGGACTG
TGCTATATTA AATGACACCG TGCCCAAAAAG CTCAAAAAATT ACATAGAAAG TAAAAGTACTT CTTGAATACT AAAACAGTTA
AGCATAAAAG GTTGTGAATT GGTCCCAAAAG TGATATTAAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCCTC
TAAAAAATGCT TAGGA

SEO ID NO:1272: (Length of Sequence = 323 Nucleotides)

GITITAGATA TITTAAGATA TITTAACTGTC CCCTGTGGCT TITAAGGAA AAATAAGTAT AAATNCITGA ATATTAAGAN TITTAAATCA GCTAAATTCA GGGCCAAGAA CIATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACINATC AATGGAATTT AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GENTACTTTG GGGGCACATG ATCTTTCAAA ACATAAATTA GGG

SEO ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAGCG AAACCCTGAC TCAAAAAAAA AAAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC
AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGNCAGCACA GACACAGAAC GTTTCCAACA TCACACACAG
TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCCTCATCCC TCTGTNGTCC
CCTGTTACAA GCTTAGANCC CCCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC
AGGGGGCAAA T 331

GCAATGGGAT CIGGAGCCAA AGAAAAATAT ATCIGAGTIC TAGCTCCTCA CTAAGTAACT GIGIGATAAT GGGTATGTCA
CTCACCCTCT TTCAGCTTIG GGTCCITTAT GIGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGIGAACATC
AAATGTTATC AGTAACTGIC AATCIGTTT ATTAATTGTA GAATGTCCAA AATATTAGIT TGIATGGACT TCAATGAGTA
TGTTTTGIGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCCTCTGCAC ATATCATGIT TCAGCCTAGT ACAAGGCAGC
CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEO ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TIGCAGAATT TIGGITAATT GIGAAGCIGA AATATCCIGA CTCTACCTCA AAGITAATGT TITAGGIAAC
TGAACAGGIA TICINCCCAT TACIAGTATT GAAGICAGAA TACAGAAACA AATAGITACT GCCAGAAGCA GAATGGAAGA
GCCAAAAAGG ACACAAAATG GACGCCATAA AINCTGAAAT AAAAGIGTAT GATGIGTTCT GAGICACTGT AGAAGICATG
CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGIGG GACATTGGIC CTCGGAGGGC TICGTANGIG GITCGGTCC

SEO ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG CTGGAGTGGA GGCTTGGGGA AATATTGACT TCCAGGACCC AGGGCTTGAG GTTTCNTCT AGCATGATGT CAAAACCAAA GAGTTCATGG CAGCTATAGG GCCGTCGCAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT TGACAACAAC ATCCTTTATC TTCTCCCAGA TGGCGTCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC TTCA

SEO ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG
CTTTCTGGAA AGCAGTCACA GCGGAATTTC TGGCCATGCT TATTTTININ CTCCTCAGCC TGGGATCCAC CATCAACTGG
GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGGTTCTNA TCTCCCTTTG CTTTCGACTC AGCATTGCAA CCATGGTGCA
GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG
CCAAGTCTGT CTTCTACATC GCAGCCCAGT GCCTGGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEO ID NO:1278: (Length of Sequence = 354 Nucleotides)

GGACTIGIAC CCIGGGIGGI GAGAAGACCC TGATIGGITI TATTAGIGCA TITICTGIAAG INACIGGGAT AATCATGITC
AGITCAGCAT TITATGIGAG TITICTGAAAG CNCTITAATC AACTCCATAG ACAAGATTAT AGIGTIGCAC AGCAATAGGC
ATGGGCCATG TCTGCACTGG AGGIAAGITG CAAGGIACAC CCACGGGIGA TITIATCACTC TIACAAAGAT GATAACTAAT
GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGITTAC AGAGCATITT TAATCATCAT ACTTAGATTT ATATTAATAT
TTCTTTTCAA ACTAAATTAT TCCAAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTICAGI GCTICIGIGI CCCGAAAAGA TCTTTIGACG CATAGGGCCI AACTGTAATA CACTTAAAGG ATAAGICICC
ACACGTCCTC CTATAACCTG TTAAATATGI ATGITTGATC AACCCATICA ACTTAAATINC TTGTCTTACC TCTCCTTCCC
TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCAGG ATGGAACCCT TTGTAAGAAA TAAAGICICC
TTTCCAAATG TACACATTGI ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TECCTGINIT ACTGAGACCA TAAACTITIT INITITCCTT CTGCCTTCAC CCAGTGIGIG TTAAGTCTIG
CTTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAAAACAG ATATGCAGGT
GGIGGTTGTT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTINIGT ATGINITTTA TGTTCATAGT
TTTGAGTTTT ACAATGTGIG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCCTGAAAAT
AAACATGCCC AGTAAACTAT ATCT

SEO ID NO:1281: (Length of Sequence = 331 Nucleotides)

TEAGGAACAT AAAATGGCIT GGIAAAAGIA ATAAAATCAG TACAATCACT AACTITCCIT TGIACATATT ATTITGCAGT
ATAGATGAAT ATTACTAATC AGITTGATTA TNCTCAGAGG GIGCIGCTCT TTAATGAAAA TGAAAATTAT AGCTAATGIT
TITCCCTCAA ACTCTGCTTT CIGTAACCAA TCAGTGTTTT AATGITTGIG TGINCTTCAT AAAATTTAAA TACAATTCGN
TATTCTGTTT CCAATGITAG TATGITATGIA AACATGNIAG TACAGCCATT TTTTTCATAT GIGGAGTAAA AATAAAATTA
GTATTTTTAA A

SEO ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGICAAA TGTAGTITAC AAAGGGAAAG GACAAGTACC TTINTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC CCACGGGAGG GTCGGGGAGA CGACACTTIT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGITCTCN GCAGAGGCTG GGTGGCCAGG AGCACTGTCC TCTAGCCCCC TAACTCAGGC TCTGCTTCAN CTCGGTTCCC ATTTCCTGCC TCTACCCCCC AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCCAT

SEO ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNICACCCAC ACAGCTCCCC CATACCCATA ATCTTTATT ATTITCTTCG TTTCTTCCTT
ATACCTTGTT TCAGGCATTA AACCATAACC TGITATTTAT NCTATCCTTT TCAAAACAGG TGIGGACCAT GCACAGATGA
CCTATGACGG GCAGCACTGG CACGCCACGG AAGCCTGCTT TNNTTGTGCC CAGTGTAAAG CCTCTTTNTT GGGATGTCCC
TTCCTTCCCA AACAGGGTCA GATTTACTGC TCAAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATTCTT
CCG

SEO ID NO:1284: (Length of Sequence = 283 Nucleotides)

TTITITICACA AGGIGAAAGA CCITTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG
GTICACATIC AGITATGITA GICCCAAACC TACAAATICA ACATGATCCC TATTAAAATC CTACCAATAT AGITCAAAAG
CTIGACAAGT TGATTGINAC ATITATATGA GAGANTAATT AAAAAAAAAA AAAATAGGGC CAGGIGCAGT GGCTCACGCC
TGITATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCINATG ATGTAGAGGC CAAAATGGTA TTINATAAAG AGGAAATTAC TTCTGANCCA CCCCAGCTGG AAACACTGGT AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC TGCCCTGTGA GACAGCCTGA AAGTTTTTTIN CAGATTTTINT GTGAACACTG TCTGAATTCA CATTTGGCAA AATGATTCTN CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTIG TACAAAGIGI GCATGINAGC GIGCGIGIGI GINITGCATI TITCCCCCTI TAGGIGGITC AAATITGGAA
TITGIGAAGG CAGAGCIGAT AATIAGAGAC AATAAAAATC TGCAGAGIAG ATGGITCCAC AAACAAGACT ATGAAAGAGG
GGATAAAAGA AGAGGICAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGIGIATIT TITAAAGAAAA
CATGITCAAA CIGCATGAGA CAGAAAATAG CACICNGITA TCCICCIAGA CITCINAAAG TITTGAGITT GICIGCAATC
TCCITCCATT AATCCNCTIT TGCCATCTIC AGAA

SEO ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT
GATGCCTAAC CAGCAGCAG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC
AGAGGAGCAG CAGATGCAAG GCCTGGTGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT
AGTGACTCGAC AAAATGTGGT CCAGCCGCCT TCCCAGCAAC CCACCTGGT CCCTGTGAGC CAGTNTGTGC AAGGAGGCCT
NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

SEO ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGGNTCAT GCATCANCAA GCAGTTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC CTGGGTAAGA AGTCGCAGGG CTCCTGGATA GTCATTAAGT GAACTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT ACTAGGTGCC GGAACTGCAT TTNCTTGCTC ACAAGTAATT TTTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGIG AGGGGAAAGG ACAATTITAA AATTCCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC
ATTCAGCTGC TATTTAANCT TAATATCTIG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC
TACACTTAAA GACTACTACT ATTTNATAA AAGGTAATCT ATTCAAATTT CITCACAGAT TTCCCTTGCT GGGGATCAGT
TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG
TGCCCAGGG

SEO ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GIGCAGCTTT GITICATGGG TAAATIGCAT GITICTGGGG CTAATGTGGT TICTITIACA GAAAAAAGTA TCAGAAATAA TCGGITAACT TINCICACAT GGICITAACT CITCITCAGG AAATATCTAA CITGTAAGIG CAATCCTICT TGIATAGCIG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTIT TIAATGCAAG CCAGAATGAC TCINCTGIAT CTTIAGCCIT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEO ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAACTITIGG GAGGCCGAGG TGGGCGGTTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT
GGAACCCCAT CTNTACAAAA ATAAAAAGCA AGAATCACCT GAGCCCAGGG AGGTCGAGGC TGGCTAAAAA TAGATCTGGG
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCCAGGG AGGTCGAGGC TGGCTAAAAA TAGATCTGGG
GGTAGTGGTT AATNGGGCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTCAG AAAATCC

SEO ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA AACGAGGATT AAGGAAAACA TGTTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEO ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCCAC CATAAGTNCC TGGAGAAGGT
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTTCCACA TTCAGGTTTC TCTGATTTTN ACAAGCTTTT
TCCCATAAAG ACTGCATTTN CTTTAAAAGC TTCTCCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAAGT
AACATACAGA CCGTTTCATT GGGAGGGGGC CCNGAATCNG AGACAAATAA GTCCCTAGTA AATGGCATTT

SEO ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGCCA TCAGGAAAGG TAAGGGCCCG GAAACCGGGC CCTTGGAGAA CCCTGCCCAG GGGAGGCCCA
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGGG CAGGAGAGGC CCAAAGAGCT AGGTCAAGCA GCTGGCTCCC
CTGGGGTTAA ATACATGGGT TTTTGTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTTT
CCTGCATCTT TACTTTTACA TTTGINCTTA GGTTGCCTAA AACATTINAA ATACAATAAA ATGAGTGTAG CAAAAATTAT
TGAAGCT 327

CAACCTCTGC CTCCCGAGTT CAAGCGATTC TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CACGCCCAAC
TAATTTTTTA TTTTTAGTAG AGATGGGGTT TCTCCGTGTT GGTCAGGCTG GTCTCGAGCT CTCGACCTCA GGTGATTCAC
CCACCTCGGC CTCCCAAAGT NTIGGGATTA CAGGTGTGAG CCACCGCGCC AGGCTACTGG TCTCAATTCT TTTGGATACC
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEO ID NO:1296: (Length of Sequence = 247 Nucleotides)

GEAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTIG AGCTGGGCTT GATTCCATCG GGTAGTATCT GGAAAAAAA AAAAAAATCC CAGATGAAAG AATGTACAAA GACATGAGCA TGCAGGGCAC ACTITGGAAA ATGGGNGAAG TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAAC TTTTGGATTT TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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GACTICITAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTICGTG
AGACTIATIC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA
AACATGTGGG AATTATGGGA GATACAATTC AAGITAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG
GCCCCT

SEO ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAAGAGCA AAACTCCATA TCAAAAAAAA AAAAAAAAA GAATTGCTGA CCTTTATGTG
TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA
ANTCAGTAAG TAAAAAGGAT GTGTAAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTCA AAATCAAAAG
NCACGTTTCA GTATATATTA TAG

SEO ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATIGI TGIGIAGITI ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCAGT TTAATGGGAG ATAATTITCC CATGGACGAG GGGATGGGA GGAGGCAGGG GIGGITTCTG GATGAAACTN TTCCACCICA GAAGATCATC AGGCATTAGT TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GITCACAATG GCACTCGTCG CATAINCCGT CGACAACCCT TTTTTGAGGT TCCATGCTTC CCATTGGCT TT

SEO ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG "GAAACTCCA TCTTAAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC
TACATCATAG AATTGTTTT AGTGTAAAAT GTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT
GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT
CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEO ID NO:1301: (Length of Sequence = 304 Mucleotides)

GGITGCGGGI TATGIAAATC CCAAACITAT GAACAGGAAA TGIGIACAGI GCATGATAGG TTAAATITIN CITTATTGIT GICCAACGCA GGICCITIGG AGAGAAAAAA AGATCACAGI GCIGACCAGG TAACICAATA GGITAAGICA AGGIAACCAT TGAAAGATAA TAGGATTAGG GAGGIGITTA TTTTATGGCA TCITCTCTCA TGGAGITCIT AGCACTICGG ACAATITGIC TNITCCCCAC TITGIACAGC TGITATGIGT CATTCACCAG CCGCCIGIAT TTAACTIGCC TACT

SEO ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGITTATTEC CATACAGAAA ACATTITATA AAATAATATE GIAGACITCI ACTICAACAT ATTCACGTAA AAACATCACA
GIGCAAGAAA GIGATCACAA TIAAGCATGA AGACATCAAA AGCCAGCCAG TATTITAACT ACAGAGCAGA ATATTCITGC
TGICCCTTCC TAGAAAATGI TGGCACATTC ATTAACTGCT CAGGITACAA AAATCACTTC GIGICCACTT CCTGTCCTTC
AATATATTTI CATAACTACA CTGTGTTACA TTAATGCTGG TGGACAAATT AGCTCCTATA AAATCTAAAA ACCTTTTCAG
GIGGGCACAA TGGTT

SEO ID NO:1303: (Length of Sequence = 316 Nucleotides)

TEGRICATIA TATEGTICCEG AGITATATEC AGCATCCAGC TITCAAGCAG ATGINICCCT AGGCAATGAT GCAGCAGTEC CCCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCTIT AATCATTCCT GGCTTCCCTT ACCCTACTGC AGCCACCACG GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGGC GGACAGTATA TGGTGCAGTC CGAGCGGTAC CTCCAACAGC CATCCCCCCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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319

SEO ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTITINC TICTICICC CCIACATATA TICTAAACCT TCTAAAGIIT TITNATITIT TIAAGGATCA CITTATCATA
AAATAAAATA TCCTITTCAT ATAATAAATT ACCTAATAAA AAGICTITIT TITTCATATT AGCCCAGGIN CITTGCTACA
TITATATGGI AATAAACGCC TITATTAAAA TAGANTATTA AATTATAAAG A

SEO ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAAA ATTTATAGTA CGITTTCAAC TITTTTTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA GGACCACTAAA TAACCIGATT AAGCTAGAGT ATGACCAAA TIGCCACTTA CTTTGAATTG TTTTTACCAA AGGTATCACT TIGAATAAAG ATAACITTCA TTAGACATCT ATCTTTATGT GTTCCTGCCA TCATTTCAGT GAGATCAGAG GAAAGTTAAAA TTAGGAACAA TGAAAAAGCT TAAGAAATGA ACAATCATCA TGCTTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEO ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTITI GAAGGCTTOG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CCTNCTGCCA GCTTTGCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGGAATC AGCAAACTGT GTTCGGACTC TGGCAGNTGC AGTTGTTATC AAGCCACTGT CCTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGIAGT GAAGAAAAAG TIATAACAAG TATACATTAC ATTITAACACA CCTAGCACAT AGGACACCCT
CAACAAACAG CTACAGCIGC TGIAAATCAT GIGIATATAA TATAACATGC AAGCATATCT TCATGIATIG ATTAATTACT
ACTITCTIGGA AAAGGATCIG AGGAACATAT TIAATATATT TNATATGCCT GCTCATATGT NCATTITAGIG CITATCAATT
ATATTTAGIG CITTTCTATT AGCTTCATCC ATTIGATTAA GATAGCAACT TGIATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCCGGCCAA CGIGGICITC CICIACATGC TCIGCAGGGA TGITATCTCC TCCGAGGTGG GCTCGCNTCA CGAGCTCCAG GCCGICCTGC TGACATGCCT GIACCINICC TACTCCTACA TGGGCAACGA GATCTCCTAC CCGCTCAAGC CCITCCTGGT GGAGAGCCGC AAGGAGGCCT TTINGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG CCGACCCACA CTACTTCACA CAGGICTTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACTTINAT CTTCCATTCA ACCCTCCCTG CAAAATCCTG
ATCTAAAAGC AACCCAAGTA TTTGCCTCTT CAACCTCCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT
GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTGC TGCCCACTTT CTCCTTCCAT ATTTCTCCAC AGCAGCTGGT
CAAAATACAT TINTCCCCAA ATGTCTTACA CAACCCCCTT CTCTCTTATC ATCCTTANCT CACCCCCACC CCAGTTCTT

SEO ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTITIG CICTIGICGC CCAGICIGGA GGGCAAIGIG CGAITICAGC TCACIGCAAC CICTGCCTCC CGGGITCCAG
CGAITCICCT GCCTCAGIAT CCCAAGIAGC TGGGAITAATA GGCACITGCA ACCATGCCCA GCIAATITIT GIAGITITAG
CAGAGACGGG GITTCACCGI GTIGGICAGG CIGGICITGA AITCCIGACC TCGIGATCIG CCCGCCTCGG CCICCCAAAA
TGCIGGGAIC ACAGGCAIGA GCCACCGCAC CIGGCCCIAT AITCCIGCITC CIATCICGIG GGICAIGGIG TAIGGCITIT
AITTAITICA ACCIGCAGIT GTITGCAGAA CATCIG

SEO ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCTTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT
CACTTCAGCT GGCGTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT
CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATTAGGAGAA
AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC
TAATTTGGAC C

SEO ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCIT TATAAATTAC CCAGCTTCAG ATTITTTNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTC ACTACATGGT TGTTTTGCCA AAATGAAGGC AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTTGAGGTGA AAGAGCTGGG GTTTAAATTT GINCTTTACC AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG TGGTGTTTCA GAGGGGGGT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TEGAGCTGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA
AGGAAAACTT TTTTTTAACA ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT
TTGTCTTCGA CGACTAAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAAGGCTA
CATTTTGAGC CTTGCATGAT TTCATTCATT TATGCATGAA TTCATTTGTT CAACATTTAT TTAGTACCCA CTATATGCCA
GGCACTGTGC CAAATG

SEO ID NO:1314: (Length of Sequence = 391 Nucleotides)

COGGITTAGA COTCAGTOGG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA
GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA
GAAAGGGTTA TAGAAACACA TCCCTGACTC TTTGGTTATG TCCCACGTCC TCTGTGTCTC CTTCCCCTTC CCTACTCTCC
TTCCTTTCTG CCTCCTTGTC TCCCTTGGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGTCCT AAACACTGAT
CTNCACACAC CTTCTTTAT CTTCCACCTG ATAGGCAGGC CCCAGANCCC CTTTTTTCCT AGCTTTGTTC T

SEO ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCCTG GAACACTGGT GITTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT
TAAAAAAGTAC TAGCCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCCTTTCT AAGGATAAGG
GAGAATAAAA TAATCACCAA GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC
TGTTGGNCAA CATAATGAAA TAAATAAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA
GGGCCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGITTACA GGITTIGAAA GGITTGINAG ATTAGIATIT ACTTITAATI TITTGAGIAA TAGAATGCGI TTAGGITCTA
AATTACTATG GAAATGCCAT AGIGAGGATI CINCACAGAT ATTAGAGACC TTCAACAACA TAGIGAAAAT AGATTIGICC
TTTCITGTAA ATAGCTGAAC TATGAAAAATI TGANCTGICA CIGGAGGGGG CATTIGCNCI GAAGITIGCC AAAGIAAAAA
TAACITINCI CITTAGIAAG AAAAAGCIAT ATTITNCAAT ACIGCCIGCC ACAGCAAACA AACAAAGICI TGITTGIGIT
TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

SEO ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCCGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA
CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT
GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG
TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTTCANGTA GGTGATTTTT GTATTG

SEO ID NO:1318: (Length of Sequence = 300 Nucleotides)

GIGGGACTAC AGGIGCACGC TATCATACCC AACTAATITI IGIATITITIA GIAGACATGI GITTCCCCAT CITGGCAGGG
CIGGICTGAA ACTCCIGACC TGAGGIGATC CACCIGCCIT GGCCICGCAA AGIGCIGGGA TTACAGGIGI GAGCCAACAA
GCCIGGCCCA TITATITACT TITTAATITI CATTITICIT CATCAIGIAG AATGGACAAT TICAGGAAAC TGATAGAAAA
TACIGICTAA CATCAAATIT TCAAAAAAGT TICTCIGTAA CAGATAAGGC AGICAATITIC

SEO ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GIGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG
GGTCAGGTAG AGGGCTCCTG GGCCCACTGT AGCCCCTGCT GGGTCAGTGT AGCTGGAAGG CTACGGGNCC TTAGTGGGGA
GCCACAGCCT TTCCCACTAG GGGGCCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC
GCTGGCCCTA AAGGGAGGTG GTAATNAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEO ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGICITGATC TCCTGACCTC GIGATCCACC CGCCTGGGCC TCCCAAAGIG CTGGGATTAC AGGCGTGAGC ACCGTGCCTG
GCCGAGATAA TIATITIINA GIGACGATIT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA
GAATATTTGA ATGCTGGITA ATATATIINT TITAAACTGT GATAGAATTG AAATCTTGIA GCCACATTTT GAAAGITTIAT
TCTTCATTAA CTAGTCTTIT CTCACCTGAT TTTCTACAAG AGAGAATTIT CCAAAAAGGIT AGITGTCGIT ACATTAAGAA
CTTGGGGTTT GYTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTTTGGCTAA TCATCCTATG ATTTTCCTAT AGCTTGAAAA CTTTTTATAT CTTAAATTT TINATAATTT TGAAGTATTA
TTGTTTGGGC TTTGTATATC CAGTGTATTT TCAATTAAAT TCCCCTAACT AAAGTAATTC AAAAGGAATA AAAGTGTAAT
GTGGGCTGGG CGTGGCCGC CATGCCTGTA ATCCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGCCAGGAG
TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCACATGCC
TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGIA AAACAAATCC CCCTCCAATG CITTGIAGAA GGGGATIAGA ATCACTGIGG AATTCGGIAT TGGCIAATAA
AGTATAAACG CTAAAGATCA ATGCCTGAGT GCACAGITGI CCTTCAAGCC ATTGIACTTC TGCITTCCAA GANIAGANGA
CTACTITITA ACCAAGANIT AAAAATAANC TCATAATTTA AACACCTCIT TCATGCCAAA TGGAAATCIT AGTGITGAAT
AATCAGGCTC ACCTGAATAC AAAGTTGICC TGAAAATGCT GACAATCACA AAAAAGGTTC TAGAAGCTIT TTCAAAAAAC
AAGTTCAGAT GGITCCCACT GAGTTACTAT TTGAGGTTAA AG

SEO ID NO:1323: (Length of Sequence = 244 Nucleotides)

CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA
TAGGATITGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC
CINATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGINACCCT GCACAGCACA GAGGGGAAAG CCCTGIACCA GGTGGCGTAT GAGAATGAGG
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC
TTTGCAGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT
CAANTCGTCC TAATTCGGTT TCCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGITATIT GIGIGIGIGI GIGIGIGIGI GIGIGINCAT CIGCAAACCC TGCACITCAT TATCCAAAAA TTATITGATA
TTTIATAATC AGAGAAAATG CIATITITAA ACCCTACCAC TGCIGACCAA ACAACAATCA CAACAGCATA ACACTAAATA
CTGITCAACA AATCIATITT AGIGIAGIAA TTAAATAATT CCTAAAAATTA TAGACATCCC TAATATICTI TCCNITAGIG
GTTCCTCAGA GIGCAATCIG TGGAGCAACT ACCITGAAGA AATTITGGGGG AATGAGACCN TGGGAACCCT AAATGITTAG
NATGGIGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTITIGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAAATGAAC
ACGITCTCCA TITTTAGTAC TITTTTACCT GTAACCCTCT GTCTACCTAA GATGAATATT TATTCATTGA ATGAATCATT
TAATTITIGGT GCCCCAAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTC
ATATTICTTCA ACTTAGAACA AATCTAAAGG CTCCATTTAT CCCTACTAGA AGTGTTCTGT TGTCTTTTTC ACTCTCAAAA
TATCCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTITICGAGAA TIAATICAGC AGITIGGIAAA ATCATICITAT AATAATGGGI ACCATICTICC TCTIGICCCAC ATTITITATGA
AGICTICTITA AATTIAAAAA GGCAATGIGC TITIGIGGITC TIGAGCAACT TAAATACGIT GCTICTGAATA GITATIGIGA
TGAGGIAATT TGTAACAACT TITIAGGATCA ATGCTAATITI NCTIAAATGT TTCTGTAGIT TCCCCTTTAT TATAAAGITAT
ATTAGGCTGG ACTICTIGGCT GTAAGTGGCA GAAAACTCAA CTCAGATTAG TTAAGAAACA AAAGGGIGIT GGIGACAGTG
GTGGCTTTCA GACTATTGCT GCAGGCCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAT TCTTAAGCAG AGTACTTAAG TACAAAATTG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA
AAAATACATG GTGTGTGTIT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAAGCCAA CAGATATAGT
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGCTGGC
AACCTGGGGG CCAATTACAC TAGAGGGTTG GTAGAAAAAA GAGGAATAT

SEO_ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTTNCTAAT TGCAATGGTT ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGN CTTTTATGAA AAGGCGACAA TGGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTTTA GATTACATTA AAATGGCTAT TTAGACCCAT

CTAGCTGAGA CTATTCCAAA ACAAACTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN
TTTACTNCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATITAA ACAAAATGCA AAACIGAACG TIACCICAAA AIGAAACAGI GIGIGIGACIG GCIGITAGAA GIIGAIGGCG
GICIACIGIT TGATATICAC TGCCATCITC CICIGCCCCA CICIACCICA ACICGGGACC GCCICACCIA AIGGIGGGCI
TIGCCGCITT AIGCCNIGIA GAGNAGACAC IGGGIAACCA CAGCAAATCA ACACGGENIC C

SEO ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CITGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAGTGCT ACATCACCTC CTCCTCTTAC
TTCCTTGAAC AGCAATATTT CTGGATTTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TINITTTCAG CAGCCAGTTC
CTTCTCAGAG AACTGGCCCA AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCTNATTC ACTCCTACAT
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGICTITGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA CGITGATGGC AAATGGCGCC CCATTCACCA CAGACTGGCT TGGAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT TATTCCACAG CAGAAGTACT CCTTCGAGCA GGTGTTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT GGCTGCAGCC GATGGACATG CGCACATCGT GGGAACTGCT TNTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCCAGCIA ATTITIGIAT TITNAGIAGA GACGGGGITT CATCATTINA GICAGGCIGG TCICAGACIG CIGACCICAT GATCCACACG CCITGGCCTC CCAAAGIACT GGGATTACAG GCATGAACCA CCACGCCCAT CIGATTICCC GITTICIGCA GGGIAAAGNC TCAGGGCCGG CCCATTGNIT TCAGGANITI T

SEO ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTIT TIGITGAAAT TIAGAAAATG TGGATCITIT ATACTIGCIT TCCCTTTICT TCIGCCATCI TIATCITCIG CTGAAGGAGA CAAACAATAT TITAGGIGAC ATCIATCACT TIATGIAAGA CCIGCAAACA CTCAIGTIGT CITCCGACAG ACAAATGGAG AATGIAAATC TGITACACTG TGACAGGATA TAATINIGGA TIGCATAGGN TINCAACAAA GIGICIGIGT GATGANIAAA TGGIAAAATA TATITAT

SEO ID NO:1335: (Length of Sequence = 279 Nucleotides)

GENTICITETT AGAATGCAGA TICTAATTAA AAATGTGTAG GACAGGGCCT GAGACTOCGT ATTTCTAACA AGTTCCCAAG
TGATACTAAT GCTACTGCTT CACAGATCAC ACTITAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG
ATTCTGCACA ATATTTCATC ATACAAAACT GNITTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAGC ACTCTTGTGT GGACTGGTCA AAGATGTTCC TAAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG CTGGCTCCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA ACCCTTAGGA AACCCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

TTIGATAATA AACATAAGCC AAATCCAAAA AAATGITCIG GGTTTTTCCA TCATTTCCAC TCATTAGINC CAGGAAAA

SEO ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTITCCTCAG TATCACAGGI ACCIGITTIN CIGGAATITA TITAAAATGI CACCITGIAG TGITCCCTCT CIAGGGCIGI TIGITTCATT TCCCTCIGAA TGAATGCIGC CACACGGICA TATGIGAGCC AAGITTACAA GAATGGAGIT GCIGCIGAAG AGACTCTCA TTCATCICCC CCAGTGCCIG TCCITCACAA TCATAACGIT ACCCITGCIT GACAAATATA CIGTATGGCA AGTCATAAAG GICTINGAAC AGGACTTGAC CC

SEO ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGICCCCTT TATATAATAT AATCAAGTIC CTCCATCIGG GCATICAGIT AAATICIACA ACATIGCCAA AATCIGATTT GACICIACAG AATATGIATA GITTATTIAA CCAGATAGIA ATTTAAAATT TIACAACATG CGIATTTCAT GIAATATTAA TAACAGIAAT TTAAATIAAT ATTCAATACA TACCGITIGA ATTTTIATAA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTCAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCCTTCCTCT
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAAGTGGA GGAGGACACA GGACTAGCCC ACCACCTTCT
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAAACAGG TCCCCTCAAT GTACCAGNTG GTCACCTATA
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEO ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC AGGATTTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTGC TCGC. CCTC GCCTACTGCT CACCTCCTGC TGTGGGGTCC AGTTCCCACC ACAGACCACT GGTCTNTGAC TCAGGGACCAC CTAC CCT AACANGGNTG AGGAAAACAA CTGGGTTCAT CACACAATTA TTTTAAAGTT CAGGTTTTNC AAATAACTTA TCCX

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTTGGCCAGA GGAACCAGGG CCCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAAA AGTTGTGGGG GTTCCTTGGA ATCACTGGCT TTTGCCGACT ATGGNTCCCC AGATACAGGG AGATACACTC TAAGGAGACC CAGAGGGCAA ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC AAAAACCTTTA AAGCAGGCCC TTCTTNCAAG CTCCAGCCTT TAAGGCTTNC CACAGG

SEO ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCCTTCCCC ACTCCTGGT CCCCGGGAGC AGCTCCTTCT GCCCGANINA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA
AGACCAGGAT TCTGTGAGTT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGGCCACTG ATGAGACTAA
AACTGGCTTC CCCTTGGAGA CGGCAGATTT CAGGCTGATC CCTGCTTAAG CCCTCTCATC CCCACGCTGG TCCTGGTATT
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATITCCA GGAACTATCC
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

GAACCCAGGA GECGGAGGIT GIAGIGAGCC AAGATCGIGC CATIGCACTC CAGCCTCGGC AACAAGAGCG AAACTCCATC
TTAAGAAAAA AAGAAGGGIG TGATAGITAA ATTIATGCAT CAACTIGGCT AGGCAATGGI GICCAGATAG TIGGTCAAAC
ATTATICTAG ATGITTCTGI GGAGGITATI TITTAGATGA GATTAGCCTI GIAAACTGGI GAAAATTGGG TGAAGGAGAT
TACCCTGCAT AGIGIGGIGG GICTCATTIA ATCAGCTGGA GGCCTCAATA GGGAAAAAGA CTCACCCTINC CCTGGAGCAA
GAAGGAAATT CTTGCCCAGC AGAACTTCTI NGGGCAGCAG AATGCAACCA TAAACTCTT

SEO ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGCTG TECTCTGCAG GTCCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TOGTAGGACA
CCCTGCAGCC AGAGCCGTCC GCCGTCTGGN AGGCTGCGCT CTGCGCCTTC TTCTCGGGGA GAGCAGGTGG CGTATCTNIN
TGCTGCCCTG GGGCCAGAGG TCCGTNTGGC TGGGGATGGC CACCCAGAGGG CAGCTGGAAA GGAGGGCCCAA GAAATGGAGA
CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTTC CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGGAG
TCTTNCTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCCCTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEO ID NO:1345: (Length of Sequence = 347 Nucleotides)

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTG CCAGCCTTAA TTATATTINI NICTOGCICG TICACTCTC CTCTCCTTCC
CTCCTTCCCT CTCTGCCCCA CCCCCGTGTA CATTATATAC CAATTCATTG GAGATATATA TATGINIGIN INTENGINIG
TGTGTGINC TGTGTGTG TGTGTGTAA AGAAGCAGGA TGTCTTACAC AGATGTTCA TATATTGAGG NATTACAGAG
TAATTACAGG GAAAGGTATT ACACTGTTCT TCAACACCCT AGGCAGT

SEO ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAC TITTITAAC TITTIGIGCA CAGGACAGAA AACTGCCTGI ACATGCTATG TCCACTITTG GAACACAGAT
TITTAACAAT TATGAATGCA CAAAATCITA CATATCATGC AACTCTATGC CAAGAACCCA ACTTTCTTCC ATGCAACAGA
TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA
CCAGTCTTAA CAATINCTTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEO ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGIGGATAT TIGGTAGCAA TGACTGATGT GGAAACTACA TATGCAGATT TTATTGCTTC AGGAAGAACA GGTAGAAGAA ATGCAATACA TGATATCCTG GTTTCCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG TCTTGATATC AACAAGACAG AAGGTGAAGA AGATGCACAA CGAAANITCTA CAGAACAAAG TGGNGGAAGC CCAGGGAGAA GCAGCAAAAAT CTGAAAGCTT AACACCCCAC TTTGACCCTC GGCCACACCT GAAAATGTCT CAAATCTCCA GGCNGTATCT GGGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

GCCCCAAAAA CAATGACACA AAATTCATTT GGITAATTCA TGTAAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA AGIGGGAGTA TGATTAGGAG GGGTGAGATG AAAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACACG

CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTCGTATT TTTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT
TGCAGTTTTC AAGGNCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEO ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTTGCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TCACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGTTCACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG
GTTTCACCAT GTTGGCCAAC CTCGAACTCC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA
GGCATGAGCC ACTGTGCCTG GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEO ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGIG GGATGAGACT TCAGCTITAT TGGAAATGIT TTATITCCIT ATCTAAAAAA ATACTAGAAA GAAATACAAC
AAAATGITAA CAGITGITAA TGICGGCCTC TGTAAAATATA GATATTGIGT TACTITAGIC TTITITITAA TCTCAACTAA
ATTAAAAAAG GAATTITAGI CITITITITAT CICAACTAAA TTAAAAAAGG AATTITAAAA CCCTAGIGIT ACATGCAAGI
GAGICCAATA ATGGCAAAAT AATAATGAGG NIACATAGGA AGGGIGACCT AAATTITAAT GGGIGAATAC TGGGICCCCG
GTACAAGITT GANAAATTIT GAATTICCG

SEO ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTATACT ATTTAAAAGA ATCCITAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA
AGITAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCATG TTACATTTTT CTTTGTGGGG TTTCTAAATA
AAACTTGTAA CATGAATGTT TTATTCTCAT TCTGTATTTT AAAAAGAAGC TGAGTAACAA AAGG

SEO ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGICTGA CATTAGGITA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCIGIA TAGCTITGCG GTAGITGAAA
AAAATGCAAG AGAACAAAAA AATTITTITGA GTAATATTCA TCICTGCAGA TCTGAGIGAC AGTCCGCTTG AAACACCGCT
GTAAAAAGTGG TAAAAAAATGA TITCATTGTG ATTATGTTAA AATTITTGAT GTCTCINITA CITGITTTAG GGGAATCTGG
TCTTCCTGNC ATTTATACCT GGATANGINC CTTTCCCTGT AATTITTNCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC CAGGCACCTC TCTGTGTCAG TTTCCCTGGA GAAGTCATGA GTTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TNTAGCAAGA CTCCTGGGTT CAGCTCCCAG TCCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTINN TGCCTCTGTT TCTACGGCTG CAAAATGGGC ACAATAATGT CAGATTCATG AGGGATAATA AGGACTAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC TTATAAAA

SEO ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGITTCAT TAGGCATCIN CITCATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCITTAG GAAATGTGAA GGAAACATGG ACTGAAAATC TTCTGGTGGC AGGTACTCTC ATGTGTTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCCTCATC

TIGCAGAAGC CTIGGCTCAA GIATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEO ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTAG TTATTCACT CTCTCTTIA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCCGCTG
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCCAGGC AGCCTGGAGT ACCTCATCCC
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCINAAGT GCAGTCAGAA CCATCAGGG GINGCCGGAT
CTGACGGCTG TTNACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCINAAG TCACTINCAGA TCCCATCTTC
CTACTG

SEO ID NO:1357: (Length of Sequence = 231 Nucleotides)

TITCACAAAG AATTTATGAT TECTITCACCA GETCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTACTATCAT AAGAACACTC CTTTGGGGGC ATTTGAATAA
TAAAAAGGNC TACATTCTTT GCACCANGTG NICATTTTCA CCCACATTCC AGTATTTINC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TIGIAAGCCC CITGAGCGCA GGAACTGGIT TITTAAAGAA TGATGTATTC TTCACAGTGC TITCCCTTTC
TGITACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANICTT AAGTACAGAG AAAACCTAAG AATNCTITTA
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTAINIGT GAGAAACGIT ATGTAATGAA AAGATAATTG
ATGACACACA CITCCAGAGN GTGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

SEO ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGIG CAGGGAGAG ATAGGACTIG ATGCTTTCCA GGGGAAATAT TTAAAATTIC AGIACIAAGT
TAAGICTGIA TCATTTIACT TTTTTTATAG TTTCTTATTT TATGITGIAT GAGATGAAAA GCTTGCACAT AAAAGATGAT
AAGAAATTAG AATTCATCGI TTCTGITGIA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATTGITGITA AAATATGGAT
TCINCITTCC TTCTAGIACT CCCCTAGCAT GACANIGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEO ID NO:1360: (Length of Sequence = 366 Nucleotides)

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCICCIACIG TCITGICIGI GGGACAGITG CCICCCCCTC ATCICCAGIG ACTCAGCCIA CACAAGGGAG GACCAACAGG
MICIAGITTI TCCACGIGAT GGAGITCCAA GCITTITITI TIGITITGIT TIGITITGGCA AAATAAAAAC AATACACATI
CCAAGAGAAA TGAATGCATC TMITGACACG TCICTATTIC TCATITACAT ATGIACACAC GNCCCITGAG TCGCTGCTGT
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCCT CGGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC
ATTAGGGAGA AAGTATTAGC AGTITCT

SEO ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCATTC ATTCATTCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC
AAATTAAAAA GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TNTNTACTGA AAATACAAAA ACAAACAAAC
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG
TTAGCCAAGA TCGGACCCTT NCACTTTCAG CCTGGGTA

SEO ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGIGCAATT TCATAAATCA GCACATTTAC TAGATAGGTA GGATACTTT NATCCATTIG TGIGITAAAA
AATTAGCGCA TGTTTCTCTT TATGCCCACT TGTATTAGCA GAATAGTGTT TTCGGATTCC CTGAATGGNT CTGTATTGAG
TCTGTATAGA CCCCGAAGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCCGTCCAG CAGTTTANGG NAGAAATCTC
TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEO ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGTT AATACAACCA
CCACCATCCT TTACTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCAGTGA TTTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTCG GTATCCACCA TTTTAAATTC ACAATCTGAG
NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TGCGGCTGTA
CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCCACA GCGACAAGGC CAAGGAGAGC ATTCGAGCCA
AGTGCGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC
AAAGAGAACC AGAGT

SEO ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCCAAAGAA ACAGAGTAAT TTTCCTCCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA
TCATTGTCAA ATTTAAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA
CTGAAATAAA CAGAATTTAC AACCTTCGCA CCTTTGCACC TTCCTCTTCT AGCAGTATGG CAAACTAAAT AACTTGCACT
GAAAACGGGT TAAAAAAGCTG TATACTTTTT TAAAAAAATAT ATTTNGNTTA TGTCATTGAT CTGCACAGTT TTGAATACAA
AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA TGCCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGINTAATTA GTTCAACCAT TGTGGTAGAC AGTGTGAAAA TTCCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGCA GCACTATTTC ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

CIGGGACAGA GACCITIGCA TIGCICCATG TGITGGCITC AGCIGGGACA GAGACCITIG CAITGCICCA TGIGITGGGG
CAGGICITCC AITTCAATCI CCICIGCCCI AATTTATTAG CCATACTIGI GCTATTIATT ACITITAAAC CCTAATCCIT
TITCCGIAAT TIGGITACAT TITGCAGAGI GCCAGCATIT TACAATGIGI CITITATGIC TCACAGAGGI CAICATTAAG
TTAGACCITI GGCITCATGI GICICCCGAG AGATGGITTA TAAAATTIGC AINCITCIGG CACAGGIGGI GTGGCITTAGG
GATTAGGACA CAGCCIGCCI GAGITCACAC CICATCICIC CCACTTAACA CTGATAATT

SEO ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTICIGGIC TAAGITITAT TATTICCITI CITCIGCTIG TITTAGGCIG ATATIGCACT TCTTACTCCA GITTICTAAG
GIGGAAGCII CGACIATIGA TITCAAATCI TITTINCITIN CITAATCIATG CATICAATGI TATAAGITIC TGTGAAGCAG
TGATTICATT GCATCCCACA TITTGATAGG TIATATITCC ATTIAGITAC AAATAATTTA AATTICCCIT GAGATTICTG
CITTGACITA TGTGTTATTT GGAAGTGTAT TITTATTCTC CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTTATTAA

SEO ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAAACATA AATNITGACA AGTAGITCAA GACTGITGGG ATAAACITAG CTAGAGTGCA GGTCATAACT ACCCATCTIT
ATAAGGAAGC TGAAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTITN TCTCTCAAGC TTGACTTAAA CCACCAGGAA
AGTTCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAAATGG TCGTTTTCAA AGGAGTAGAA
AATTCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGGA ACATACATTT NNTCACTTAG TGGCACGCAG GCAAAACAGA
ACATAGGGCC AGCTTGGTTA TTT

SEO ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTICINCE GGGGGGGAT GATCIGAGCA ATGCCCCCCA CAAACTIGGT TITCACTACA ACATCGTCGT CATCAGCTIT
GCCAAAAGCT GCCTTCIGGG CTGCACGGAC AAGATTGINT GAGGCTCTTT TCACAGCATT TCCTGCCGGC TGTAGCCGCC
TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTTGCAGGC CACCAGCAGC TGAGCCGTGG AAGCGGCGAC CTGCTTGGCA
GATGAGATGA GCTTCTCCTC GCTGGCGTGT CCCTGAACGG AGGCATTGGC CGCCT

SEO ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTCA GATAATGITT CIGIATACIT TATAAATGCT ATCIGIGGIA TCICCIGIAT AATINACAAT GITTGCATGI
AAAAAACAAA ACCCATAGAC CITAAAAAAAA AGAAAAAAAG AAAIATACAC TATACATAGG CACAGCITAT GCCCAGAGCA
TAGCAGGIGC ATAAAACACT GITGCTATAA ATGCAAGAAA AAGGTCATTT AACCACAATC ACATTTTITT NCATAACACN
GICTGAAATC TATACAATAT ATACATCTAT GITTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTTATACCC
CTGCAGGCCT GCATAAATGG

. SEO ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT
TCACCATGGG AAAATTAGTA ATTCTTTAAA CTTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAAA AGAAATTAAC
CTAGAGGTTT TACAGAACTC CATTTTTTT TTATTTNCCA GAAAGGAAAA ATTTATCTGT NCTGTNATTT TGFTAAAAAT
CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGAGAAG GGAAAGGAAG GGACG

SEO ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

AAAGGAAAAT ATAAAAGAAA ATAAAATCIC ACATTGGIGC TTAGCAGGAG AATTITTAAA GACITACAAA TCAACAAGCT GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCTTACATG GGGCTTINAG TGTCCCANTA GTAGCAGATG TCCCAGTTCT ATAAAAT

SEO ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTITCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCCAA TATGATAGAC
TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT
TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTTCTAAT TTTGACCAAA
GATTTTTACT TTCCTGGTAT AGAAATGGAA ATAAACATTN ACACTTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT
CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGCGA ATAAAAAAGG
AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAAAAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAAACCGC
AAATGCCCAT GANCIGATGA ATGGATAAAC AAAATTTGGT GTGTGTAT ATATGTGTAC AAACTTCCTT TTTATGATGA
AATAGTATTT CATTGTGTGT GCACATGTTN CACACACANT TTAAATAGTA TTTCGTCATA AAAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGTGTAGG ATACATTAAC AGTTTTCTGA GTGGGCTGCT CTTTTTTCCT CAATACTGTA
TATATTTTNN TTAAGCTCTT CTTTAAAAGA TAAATATTTT TCATACTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA
CCATTTGTGG TATTTTAAAT CCTTTTAAAT AAATCTCTGT ATTTGCAACT GCATCAAAAC AGTAAAACAT TTCACAGGGT
AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACTTTTTAGG CATCCACTGA AATTATGGGC
ATTATGTCAT ATAAATATCC AAAAATCCAT TTT

SEO ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTTGGGT GAGATTTGAA AATAAATTAC ACCACTG::TG CACAAGITAA TGTGAATCAA GCATCTGTTT
ATTTCATTCA GTTTATGCCT TT::TT:CTTT TTTTGTGCAG TGCAGTTGGG GTCACAGACT CTCAATTTGA CAAGACACTT
TAAAAGCAGG AGTAGAAATT AGGC...GGT TTTACAACTA TTACAGGAAC TGTCATAACA AACTTCAAGT GGATCAGTTT
ATTTCTGATT TAACTTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCCATA TAGAAGTCCC AAAAG

SEO ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCECAAAAT TIAGCIGITI ATTAGGITGC AAGICICICC TICTCTCCCT GCTTTCTCTT TCINCITTIT CICCCCACAA
ATCCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCNTATTAAA
TAGCTAGCTI TAAAAGGGCTC TITTTCAGIT TGAACAAAAAG TAAAACGTTC TCAAAAAGCAA AAACAGAAAA CAGAGCTTCC
ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT
CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

<u>SEO ID NO:1380:</u> (Length of Sequence = 261 Nucleotides)

AAAAATITAG TGAAGACGIG AATAGATATT NCIGCAAAGA AAACATACAA GIGGICAATA GGIATATAAA AGGIATICAA
TATCACTAAT CATCAGGGAA ATGCAAATCA AAACCACAAT GAGITATCIN CTCATACCIT INAIGAIGGC TAATATTAAN
CGAGAGATAA CAAGIGITTA TGGGGGTGIG GNGAAAAGAG AATGITCGAA CACTCITCGI TGAAATATAA GITCGIAGAA
CCATTATGCA AAACAGTATG A

SEO ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCIGG GACACAGAGC AAGACTCCCT CCCAAAAAAA AAAAAAAAA TTATTAGAAA GAGGAAGAGA GAGATGACAA AGCCTITTAC AGITGGGIGI TGGGAGTIAG AGACCCAGTA CCCCAGCCIG ACATACCTAC AGAAGCAGIG AATTTACTTA TTTACTGTTA TGAAAAAAAAT AGATGCTGCC AGCCGIGCAC AGCAGAAACT ACTATTGANT CATATGGITT TAGCCTTCAC CITTAAATAT GICTAATTAT ATG

SEO ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA
AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC
AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTCG TATATAGATC CTATAAGCGA
CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEO ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GGCCGTGCGG CIGCTCTGGG ACCGCTTCGT GCGGGGCTGC CGCGCCGACT GGTACCGAGG CAATNACCGC
TCGGTCATCT GCTCTGACCA CTTTNCCCCA GCCTGTTTTN ACGTCTCTTC GGTTATCCAG AAGAACCTGC GCTTCTCCCA
GCGNCTGAGG CTGGTGGCAG GCGCCGTGCC CACCCTGCAN CNGGTGCCCG CCCCGGCACC TAAGACGGGA GAGGAGGGAG
ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEO ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGIGGITTIG ACATGIAGAA AATAAGATGG AAGGCIGAAC TAGGGCAGTG GIGITGGCAA ATAATCAGAT TICAGGAATA
TCACAAAGIG AGGAGCCCAG GATTCATGAC CATTITAATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAAGTTT
CIGGCTCGAG TAACIGGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTIG AGATAGAGAT
AGAGGCAATA TAAAGANITA TATATTGACC ATGGIAAATC ACCTAAATTC AGAAAGTTGT AGAAAACTTG GGTCTGGANC
TCAGGAAAGA CACTGGATAT GTAGATTTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTEG GTGTTTCTCG CAGAGGAGGG NTTTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA AGTGAACAAA GGTCTCTGGT TTTCNTAGGC AGAGGACCCC GAGGCCTTCC GCAGTGTTTG TTTCCCTGGG TACTTNAGAT -TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEO ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGCGA AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCCAAGGGTG AAGGGGAGTC GCCCCTGTN AACGGAACAN ATGAGGCAGC CGGGGCCACT GGCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

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TITITITITI TITITITITI TITTANITAG GCAAGAAGAG GIGIGAGIAA TIGAGGAAAA ACTGACAGAT GCITTICCIA
ATACCAAAAT TGAGCITACA ATIAGGAACI GAGTATGIGI AACAGGNIAC AGGIGACAGI GAAGATAGAA GAACCACGNI
GACCACAGAC TCAATGIGCI CIGIAACATC GCACAGITIA CCCAGCATGA CITTICCITAG GAGGCCCCCT CCICACGCIA
GAGTAAAAGI CCCAGTIAAG TGAAGCCTAC CAGAAGAACI AGTAGAAGAA GCTIT

SEO ID NO:1388: (Length of Sequence = 201 Nucleotides)

GCTAGINATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC
TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA
CCCTNTTINT GGATGTGGAG GAGCGCGGGC CGGAGCATTG T

SEO ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGG GCAATTGTTT CITAGGCCTA
GCAGATGTTT GGGATGACAC TAAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG
GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTGCCT TGTCCTCATT ACTGCCATCA GGAAGGTGCT
ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCCTTGGGT TAACCAGACA AATAGAACTT CTTTTCCTAG ACTGTTGGCT
TINTGGAGGT TGGCAGCCTC TATCACAGGN TAAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTTCC

SEO ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTTGATAGGC AGATAAGACT
AGGTATCAGC AAGACATTC AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG
GAAGGAATAT GATAAAAGAN GGATAGTTAG TAAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT
CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGTCAAG AGTATAACNG AAATTCCTTT
TTGTTTTGAA CTTCCAGTGT CCCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEO ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCCAGGG AGAACAAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCCT
CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGINC AACTTTTTAA TTTTAATAGT TTTTGTAGTA CATAAAAATC
ATGTTATGAA TTATTTTGTA GTTTTAATTA TAACTTTTTT AGCACTTTTA CCATATTCTT AAAAATTAAA AATTATGAGT
NCTGAGAAAG CAGAGAAATC ACATATAGGT ATTTGATTAA CTTTTATGTG ATCTTTTACC TCAAGCTAAT GTTTCTTAAA
ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTITITAATA TITAAAACAA TITTATTCAT GAAAATATGC TGIACAATGC ACTCTACACA GCCTCGACAC GGCACACACG CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGCG CCGGGGACGC CGCGCCCACC GCCCGTCCCG GCCGGACACT TATAAATATG GGAGAAGGGC CAGAACTNGC GCGGAGAAAG GGGCGTCGGG GTT

SEO ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGITIAT TATITCCCAA TGINCITIAC ATTINCATIT GGAAATATCA TICCIGACAG AAATACNIAC ATTATACCIT
CGAAAGCAGA AAGATCITAA TIAATIAAAA CAGTITACAT TIACCITAGC ATIAGGICIG GCIGGCTAAT TICAAAGGAT
TAAAAAATIGC ACCNATITGG GCCAACTGGG GICCIGAATA ATIATCCNGG GTAAAAGIAT AATATITCAT ACITTATACA
TITIGCTICA TCACACATIT ACITTCCACA CAGTGNICAA CITICACATIT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCITICAT CCCTGGACG ATTICCAGIT GAGCATGGIG AATAATCITI TIGATAGGCI GIIGGATTIG AGTIGCTAGI
ATTITINITGG GGCATTITGC ATCIGINITC ATCAGGGATA GIGGCCTTCA GCTTICTITT CGIGIGIGIG TGTCCCTGIC
TIGITCTGGI ATTGGGGIAA TATTGGCCTT GIAGAATGAA TTTAGAAGAA TTCCTTTCCT TTTGATTTTT TTGGAATAAT
TTAAGAAGAA TTAGTATTAG TTCINCITTA AATGITTGGI A

SEO ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTAA GATTICAAAC TGGGTTACAC ACTGGAAAAG GCTGGGTTAA GGGCCGAAAT TTAATAAATC TGTACTGATA
ACTAAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC
TGTCACCCAG CATCTCTGAC GCCGCCTCCT AGCCTTCGTT GGTGAGATAA CCNGGNATAG TGATTCCATG CGTAAACAAC
AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAAATAA TATTGTCATA
GAG

SEO ID NO:1396: (Length of Sequence = 384 Nucleotides)

TECCTOCOGE GITCATEGGA TICTINCOGCO TCAGTCTCTT GAGTAGCTGG GATTACAGGO ATGCACCACC ATGCCTAATT
TTTGTACTGA TGCCAGCACT TTCTTAGCAA CCCCAGCTGG TGTCCTAGTA TGCCCCCTCC AGTCCACTGT CTCTGGGCCC
AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCCTTGT AGCCTATACT GCCTTTNACG TTTATTTAGA GATCTAGAGC
ACTTTAACCC TCAGTGGCAA GGTTTGTGGG AACTTGAGTT CGGACCACTG GGATTGGCAA ATTCCCCTCT GGGCTAGGGT
TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTTTGGTCCAG TTTTCCTTTC TGCT

SEO ID NO:1397: (Length of Sequence = 370 Nucleotides)

TIGAGITINI TCAGIGGCAT CCCCIGCICC CCIGAGCACA CACAGIGITI TCIATITATG ACIGIAGIGC CAAGCAGAAT TICCATGINC TIGCIAGCIG CCCATICICA CCCCICAGGG TCICATACIT CICCCIGGAA GCCICCCAAG CAGICAATGI GACAGGGACC AAGIATGIAC AAGGCAACAT ATIGGGITCA AGIGCAAACT AAGAGAACCA GGGCCIGITI TICIAGITIG GAAGITITIC TITATCCIAA GAAAAGAGAC AGACCAAAAC CAAGAAGATC AACAATAACT CITCICTITG TCATCACGGI GATGACATCA AGGIACICAT ATIAACCAGA AGITACAACA AGAAGGAATT

SEO ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGITITCACC AAAGIGATAC AAGICTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG
AAGAGGCCTG TCCCTCTCAT AGGGCCTTCC AGCCACINCT TCCCCACAGG CCTGATTCIN CTGTGGCTGG GAGTGTGGAC
TGATTTGTTA TGATGTGAGA GATCCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACTTT CAAGGAGAAG TTTGTGCATC
ANTITTCAAA AAATTATGAT ATCAAAAGAT AGCTGTGCCC TACATTTGGG AAAGATACAA AAACTTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT
CAGAAACCAT AACCTTGCTA CCCGCATTGG GCATTGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGIN AGTTGGCAAA
GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCA AGGGAGINGA
AATTGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTCGG
GGATGCACAA GGGATGAACA CAGCTCATTT CCTGTNAGGT AAGTTTAGGG AATTAGAAGG

SEO ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCOGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTCGTAT TAATAAATGT CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACTTGAAT TCCATCCACA ATCCACAACT TNCTCGGNAA AAATNINTCC CAGCTTCTCC TTCCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCCTACA CT

SEO ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC ATCCATCTTA TCCGAGCCCC TCTTGCAGGC AAAGGGAAAC AGTTGGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTTATGTA CATTTGAAAA TGCCCNTTGG NTACTTGGAA
CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCTNGC ATTGCCATCT
TAATATC AGATATTACG GGATGTTAG

SEO ID NO:1402: (Length of Sequence = 338 Nucleotides)

GIAATTGCIA TITGATGITA TITTAAGAAA TIAACCCITA AAACTITAAT TCCITAAAAC AATCICAAAC AGAAGAAGCA
AAAGCITGIN CTGTGCTCCA GGAAATAAGA TICAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT
GAGIGGAAAA AACCTAACAT TITAATTGIT TITNCTCTCA ATAATTGIGT TGAACCATCC AAAAAAGTAT GATACAAAAA
TAGCACTATA CTAAGAGCCA GATGACATGI CCTTAAAGCC TIAGCTCTGC AAATTATTGG TIGIGTAACA CTAGGGNACA
ACACTTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGICTCAC TITGITGCCC AGGCTAGAGT GCGANGGCGT GATCTINGCT CACCACAACC TCCATCTCCT GGGTTCAAGC
GATTCTCCTG CCTCAGCCTC CTGAGCCAGGT GGGGTTACAG GTGCCCGCCA CCGCACCCAG CCAACTTINT GTTCTCAGCA
GAGACCGGGC TTCGCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTTGCCC ACCTTGGCCA CCCAAAGTGC
TGGGATTATA GGCGTGAGCA CTINCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG
TGACTCTTTC CTTTCATTTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

<u>SEO ID NO:1404:</u> (Length of Sequence = 325 Nucleotides)

AGCICATCAG CIATCATTIG TGITAGIGIA TITINATGIAT GGCCCAAGAC AATICINCIT TITICCAGIGI GGCCCAGGGA AGCCCAAAAGA TIGGATACCC CIGACAGGAT TCCAGGATIC TITIGIAATT NCICAGAGGC CCICIGIGCA TACTCCGIAA GGACTATCCA CATICTITAT TACTITCATT GGCAATAGGI ATAAAATTIT ATITIGITGGN TATTITACIG NAATGITACT TGITTITIGCT TATTIACTGA TIGGGTGGGA GGAAGICAAA GGATGAATAA ATCTAACCNI TITITAAAAAG GAAAGGCTAA AAATA

SEO ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTCGAACACA AAGATGCGGC CCGCACGGAG CAGATTCACA GGCACCTTGG GGTTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CGGCTGCAGG GAATGCAACT TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCCCACC TGCCCGANTT TACAAGCGGT GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCCGATTGCA ATTGAAGGGA TCTTCGGGGT TCTNCTCGGC TNCAAAGGTC CTCGACAATG TTCCCCTTG

SEO ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCG TTTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC
AGCCTCGACC TCTCAGGCTC AAGTGATCCT TGCATCTCAA CCTCACGAGT AGCTACGACT ACAGGTATGC CCCACTATGC
CTGGATAATT GINCCTTTTT TTTTTTTGGT AGAAACAGGG TCTCATTCTG TTGCCCAGGC TAGTCTCAAA CTGCTGGACT
CAAGTGATCC TTCCAACTCG GCCTCCCAAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCCTTT
TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GITAATTGGG NITCACAAGC AATAATTTCT CCACAACAAA AACCACAACI TGAAGNGAGT TGAAAAGNGN TCAATAGTGG AAACAGTCGC CTCAGTACTT TINCTITCTG GNITTCATCT CTAGAAATTT NAAGTGTITN AGNCAGAGTC CACCCTTTGT GCAAGGCENG AACCNATGAA TOGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA GAGATTCATT TTTNTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTTGG TTCCNAATCT AGTGNTAAAA GTGTCCAAGC AAATCAAAAA GTAAGATATT TTAGGGGCCCA TACCCACATC TT

SEO ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCCCAGCA CCACGAGCTG ACCTCGCTCT TCGAGTGTC GGTCTGCTTT GACTATGTCC TGCCTCCTAT TCTGCAGTGC
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCCGACGTGC AGGGGCGCCC TGACGCCCCAG
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTCGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCCTGA
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCCTACTCCT GNCCATGTCC TGGTGCTTTC
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNINAATGG AACGGCCCAC AAAGAGCA

SEO ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAACTC CTTAAGCTTT GTTAATATGA GAATGICTTT ATCICTTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA
ATATTCTTGG TTAAGTTTTG TTTTTAGTAC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTTCINC CTCTTGCTGC TTCCAACATC CTGTCTTTGT
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGRCC TCTTTAGACT GAATCTCATT GGAGNCTTTT CACCCTTCTT
GTTTTTGGGT ATTTAINTCT TTTCACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT ACACTCCTAA
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCTGTTATG TAAGCAATAA TTTTCCCGTG TCTTATTGAG
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCTT TGCATGTGGG TTCCATATAG GTGCAGAAAT TTCCTCAGCC
ACTGGAGGGA TTTCGACCAT ATTTGTCATT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTC ATTAAAAATT
GTGCCCTAGA AAACGCAAAG CTNTTGCACA ATGGCGATTA AAATTATGGG

SEO ID NO:1411: (Length of Sequence = 385 Nucleotides)

GICTCAAACT CCTGACCTCA GGCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTITT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT
TTTTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTTGGCCCAC TGCAACCTCT
GCCTCCTGGG CTCGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGG CTACAGGCAT NTGCCACCGC ACCTGGGGTA
ATTTTNGTGG TTTTTAGTAG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEO ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTCAGAT TCCTCCTGGG CCTCCTCGCC CCATTTGCGA CAGATTTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT

ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATCGGGG CCACCGTGAA

CATGGACGGA GCAGCCATCT TCCAGTGTGT GGCCGCGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC

AGATTTTCAC CATTCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GGCGTNCCAN CTNGAGGGGT CCTCANCATT

GCCATTATCC TGGGAGG

SEO ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCACGC TTTGGAGTCA ACACTGAAAA TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT
AGNCCAGTCG ACCCATGTTC TCCTTTCTAC ANCAGCATTA GACGGTG

SEO ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC
AGAAGGAATC TNTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC
CCTGTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNTGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC
TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEO ID NO:1415: (Length of Sequence = 314 Nucleotides)

CICAAACACA GCATTIGAAG TCITAATATT TTAGTACATA CTATACTATC TCINCITACA ATIGITITIT GITAAAGAAA CCATGITITIT NATICIAAAG AGITTCCITT ACTGTGGATT TTACTGATTG CATCITTGIT GATGGGTTAA GATTGTCCNN ACTGTGAAGCAT TAGINCITTC AATGIGCTG ATTCAGTGCT GCCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA TCATTAAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTITI GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACTT TAGTTTTGAT GAGATAACCT CCTTATC.....
TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA ACACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT
TCCTGTTTCT CCTTTATCCT AGCAAACTCC CCAGGTTGCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC
TGGGGCATCT GAAGGAAGGG GTTTCTGGAA GTGCAAAATA TAGGGTACTG

SEO ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTICG CCAAGGGAGC CATCAGCACC AGTTGITCCA GAGCAGCCAC AACACCAGIG ACCICCCTIC IGCITCCGGC CAATCCCGAC AGAGCCICTI CCCGAGTCTI GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GIGIGCTTCT CCTCTGCCAG CTGCTGCCAG CTGCTGCTCT AGTGCTACTI TCTCCTCCAG AACTACCCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC AACTTGGAGT ACTGGCTGG CTGTTCATCT CCTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA AGCCACCAC AACCCCTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEO ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCIT AAGITTACAA AGCIGITGGA AAACITTGTG TCCTGATTTC AACAATCACG CTTTGTTTGA AAGATGAGCC
AAGCICACAG ACACTAAATT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTGCGGAA CTTCATTGAG
GAGCAAATGA AAGGCACATG GACGAGCACG CTGGTGCAGT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGTCCTGGTA
GCAGTTTTGG GTCGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAAGAATT
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEO ID NO:1419: (Length of Sequence = 363 Nucleotides)

GIGGAAAACG IGGAAATGAT GIGGCCACTG AAAGAAATTC AAGACAACTG AAACAACTGC AGATTTCCAT TITCAGCTCG
IGTITICITA IGAACAATAA CAITGCAGAA GGGGAAATAT CAGAAAGTTG AITGATTITT AACCCAAAAA TAGAACTITI
IGTAAGCIAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACTIT IGTITACATT IGCICTATIT AGATCITACA

AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCA AATCGTTTAC AGGAAGTTAC CTAAGGAGNC TGACAGATTC AACGGCTGCT ACC

SEO ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATITIC TAGAAGCAAA TAGIGCCACC ATCCGICATG AGGITCTGIT TCTATAACGC TIGINIGICT TINAGACTAC
GTAGGIGGIA GCTTATGAGI AGIAATGINC TITTGITAGI AAATGICACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC
AAAAACTGIN TIACTATTCA GGAGAAAATG GACGGITTAG CAACAATACA ATGIAGACTI CAAAATATGA AAAATCAAGG
AAATINCTGI CATTGICTIT AAGGGCCTCC AGAGAAGTAT TAATTTGICC TTTATGIGAA TTTAATGAGA TCATGTGAAA
TGTATG

SEO ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAGTGACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT
GCNCCTGGGA TCCAGTATTG GCCCATGTAT CINCCCCATT TCCTCAGGCT TCCTGGACTT TINTTGGAGG GAAAGAGGAA
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGGG GCTATGAAAG GTAACATACC TGGAGAGTT NGGGAGACGG
CGGCTTGTNA GAGACAAGGG GAAGAGACAG AAACAGGAGT ATTCTAAGAA GCAT

SEO ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGCATA TITAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTTGTTGG
TTATAAAAAC AAGGCACATT AATGINCITG TTCTTGTACC ATAGTAATGT GNAAAAAAAA ATAGTGGTTG NAATGGTGTT
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGGNCAGATA TTTTGGTGGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG
NCATTTGGTA TGATAAAGGC NGAGAATCTT AACAATTGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEO ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGIGIGIGI TGIGIGIGI TGIGIGAGAA ATGGGGAAAG ACIGGICTAG ATAATATITC AGGIACCTIC CAACACTAAA ATGGIATGAT TCCCAGCITIA CAAAAAGCAA ACIATTITAA TAITCACCAC TCAATATAGT GIATCAAGCT CTCGGITTAT GITTAAGGGC TTAGGGAACA GCAAGCAACTA TTCGIGGGCA ATTAATNCAA AAACICATGT TACCAAAAAG GCATGTTTAG GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GICT

SEO ID NO:1424: (Length of Sequence = 297 Nucleotides)

GEAGGATTAC TIGAGCCCAG AAAAAAAAA AAGCCTCAGG GGITTCGGIG AATGITGIGT GGACTTCCGT GAGAACAGAC
GITTGATGIG AACTGANITC AAGGCIGATA CAGCCCAGAA CCAGGNACAA GGIGAGAAAC TGCTCGITTC CGGGAGGCAG
GACTTCCTAA CCGGGAGGCA CTGCAGINCA CITTCTGAAA CAGGITTGGA GGATAGGGAA ATTCCTGNCA GCCCGGGGG
ATCCACITAG TITCTTAGNA GCGGCCGCCA CCGCGGIGGA ACGCTCCAGC TITTGTT

SEO ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTITITCAA GEATGEAAAG GICAGAGAAA AATAAAATAA AACATCITIC AATAGICITI CCIGGIAAAA GCAGCGICIC INTGGGCIGG GGAGTAAAGG GIGIGGGGCA AGGGGGAGGG GGAGAGGCIG TAAACCITCC CCCAAACCCC AGIITTAGAT CCITIGGITT CCITCICCCA GAAGATGGIC AGAAGGGCAT NGIGGGNAAC AGCAGGGNGG AAAATATGGI GATGACAAAC CCCAGATGAT CAAGGGCCIG ATGCICCIGG GGCCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

. . . .

TAGIGGCATA TGGACCGGAA AGGGITAATT TAAAGGGGGG GAACCICAAA AGIITITITA AAAAAGAAAC TIGICIGCCA CAGIATGITA CCAGIGITAA CCCITCIGCC AGITAGCAAA CTTTTGCCTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG TITCGGIAAT CTTGGGCATA CATITITITAA GNATGGACCT CTTTGCCTTG TITTGTTTTC ATGCTGCTGT ATGTCCAAGI ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTTT TAATTCCTTT TTCCC

SEO ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACTCT TCTTTAATAA GATTCAGGCC AGINITGGTG GGTGINTGCG GATGATTGTT ACTGGGCAG CCCCAGCATC ACCAACAGTT CTGGGGAATTT CTCCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT GGCCAAACTG AGTGCCACAG CTGGATGTAA CCTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC
CGCTTTGAAT CCTGTGCCTT TCCAATTGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAAGTCCA
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEO ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGA AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAACTGG
CTTGTNTGAG GTAAGGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC
AGAATAAGGC TGTAGGCTNA AGGGGAGINA AACTGGTTCT GGGGGTATAA CATTGATAGG CC

SEO ID NO:1430: (Length o: Sequence = 246 Nucleotides)

CAAAATTICC TGTATCCTT CATGGTTIN CTTTTGTTIG TTTTGGTAAG AACATTIAAC ATGAGATGIA TCTTINAGIT GTTGTTGTGG TTGANCTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG CTCACTGACA GGCCTCAAAC TCCTGGGACC CAAATGAATC CCTCCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA GATGTG

SEO ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTINCCACTC GATGATGCTT CTATAATTIT GCCCTTTAAC AGAAACTTTC AAAAGGGAAG AGITTITGTG AATGGGGGAG
AGGGIGAAGG AGGTCAGGCC CCACTCCTTC CTGCATTGTT TACAGTCATT GGGAATAAGG CATGGCTCAA ATCGGCCACA
GGGNCGGTGA CCTTGTGCCC CAGGGTTTTG CCCCCAAGTG CCTCCATTTA AAAGCATTAA GGCCGGTACG GCATCTTCAA
AACAGAGGGC TGGCATTCGA GGAAACCCTT GCTGCTTTAG TCCCGATAGG GTATTTGAAC CCCGCNTATA TTTTAAGGCA
TTTTAAATTC TCTTCCCCCC ATTTTATTGA CTTTGAACAA TTAA

SEO ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGINAAC ATGGATGGAA ACAAATTATT AGGTTGINCA AAGTGAAAAA CACCAAAAAT AAGATTTAAA AAGAATGTCA GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCCAGGGG GNAGAGACTG NAAAGTTATA TTTINNATGG CTGAAATCCC CCCAANTTTA ACATAAAGCA CAACATTT

SEO ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGITTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTTGGAAAA GATTCAGTAA AGATAAAGTT TGGCAAAAAT GATTCINTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT CCTAGATIGA GITATCTATC AAGAATCATT CATICCCTCT CAGCCCTIGC AACIGITTCC NATGACITIG GACITGGCCA TGCAACTIGC TITGGCCAAT ACAATGIGAG TIAA

SEO ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCICCATAGG TCIAAGITIG ANCITITCIA GAAAAGGATI TGCAGGACGA TCIGACGAAT CITGGGCTIC CAAATTAGIT
CCAACAGITC TAGIATITIT TITITITITIT TITIGACAGA AGCAAATAAG TAAGITINAC TITGGGATIA AAACAAAAGT
GAAATGCATT TAGICCCAGG AAATGNCAAT CCITICIGCA TCINACITIT TITTGCIGIG ACCICGAGNI TCTCITGTCC
TCITCAGIT

SEO ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGTINTCTT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA GCACGTTGAT CTINTCACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAAACTTTT GGTGCTGGGC ACATNACCCA CCCTCACCAN CATCAAAGAC A

SEO ID NO:1436: (Length of Sequence = 312 Nucleotides)

SEO ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATTG TAATAAACCT
TTAANGAAAC TTTCACTTCT TGAGTTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEO ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTITGA CITIGIGAAT GAGCACAATG AAATGCCGCC TACIGATGCI TCINATGATC AGAACICITI TITAATAAAA
TAAATAACAT AAATCGITGA ACATAATGIT CCNGITGAAT GCAAANCAAA AAAAATATGG NAAACATTIT GNIAAAATIT
TITCCNGNTA AAACCATGAA CANIGGCIAT GATGAAGGIT ATTACATATG GAAAAAAAAC TCACACAAGC ATATITCNAT
TITGGCTTGAA GGGAACCCAT CATTAAATGC AANGCTAGGG ATTCTTTING AAGCAGTTGA TCCTCAGGIT T

SEO ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG CCCAGTGGCA GCAGAGGATG AGGAAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG GTAGAGGAGC TNGAGAGGAG CTTNTCCAGA CTCAAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGTNTC CTCTGAGGTG GAGCTNCAAG ACCTT

SEO ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTTTTACTCT TGTGAAGATA GCACTITAAT CCTAAATGAG CATGTAACGT GTGACAGATC CTATATCAGT TTTAATAATT GAAGCAGATA GTAATAACTA GATTATTGAC ATTTTTCNGT CATGTGTTCA GCTATTGCTT CAAACTTGCT CAAATTATAC TIGGNATIIT ATAGIGIIIT ATITATIATA TACICINCII GIAAIAANNI GGIAATCIAG TITCCAGAAT CATGCAAATA

SEO ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG ATTGTNTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGGRAFITT TTTTCAAGNA ATAATCCATG CTAAGAATGG GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACASCC AASTICATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCTNTA TTACAAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAAACAAT GIGCAGGTTT TTATAACIGA TCGGAAGAAG GITGACCCNC AGTTATCACC TTTAAAAAAAT GGICTTAGIT
AGGCTTTCTC CCTTTGTCCT TTTCCAGAAG AAACITGGAG TCTGTCAAAT TTCACAAAAT ACCCTGITGA GATTTTCCTT
GGCTTTGATA AGGGTGAATT CACAGGATTAA TTCGGAAAAG AATTTACGGC TTTCTAATCA AATTGTTCCT TCCAGGGGNT
TTTGTGNITA TTTAGGNCCT TCTAAAGGTT AACCCTAACT TTGATTAT

SEO ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAACTGAGT CACAGGGCCA AAGCCCCCTT INCCTCACGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT CCCATANCTT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEO ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC
AGTTTGAAGG TGGCCCCTGT NCTGFTATTG CACCTGTNCA GGCATTTCTT TTGAAGAAGC TCCTGFTTTC TTCGGAGAAG
TCTTCTTNGC GGGATTTTTC AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEO ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAT TINITGATGC AAAACCAGGA AACAATITAT CTCCACTGGG AATACTITGA AGAAGGGATT AGAGCGGGGC
TAGGGCAGGG AGGATCINTA AAAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATIT AACACTNA'IG NITCAGGAAT GCTAAAGGAG
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGITATAAAT GAACATCIGI TGCCTACTTA ATAGGICATT GAGIAGCIGI GACCCATICI TAATTIGIAT GTAAGCATAT
TTTTTACATA TTTGTATCIA CTTCATTTC CCTTGAAGCI TGCCAAATTG GTACACTTCA GTTTGAACTG ATGTCTCTTA
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTCCT TCCACCTAGA TTGTTCTCAA AGCATTTGTT TTTGCTGGAC
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

SEO ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTIGIGT CCTGTAGGAA ATGCTTCCTT GGGTGTTTGT ATTATAGCCC AATCCAAGTC ATCCTGAGA ACATCCCCAG
GTTGTAAGGA TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTTG GCCTATTAAC TAAAATTAGT ACCTINCCAT
TTCTCCNCTT TCTTGGGCGG GGCAGCGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGIN CAATTGINTT TTAAGTAATG
CTCATAAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG
TCTCTAGGCCC TAGACAGAAG GAACAGGGAG GGTTATTGTT AACTTT

SEO ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTTGTGGGAG GGACCCGGTG GGAGGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCGAGATA GTNAGTTTCT
CATGAGATCT GCTGGTTTTA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATTCTCTCT CCTGCCACCC TGTGAAGAGG
TGCCTTCTGC CATGATTGTA AGTTTCCTGA GGCTTNCCCA GCCATGCAAA ACTGTGAGTC AATTAAACCT CTTT

SEO ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTINCTC TCCCTGTTT GTTTTGIAAC CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC
AGAGGCACCC CGGCCAGGAC GGGCAGGAGA GGAGACCCCC GTTCCTGCAT GCNCTGTCGC CCCGCCACGG TGNTCTCCGC
AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEO ID NO:1451: (Length of Sequence = 403 Nucleotides)

COGCIGITCA CCIACGGCCI GATTAAACTI GCCTTCCTGI CCTCCAAGAC CAGATGATGA TIATICICCA CCGICTAAGA
GACCAAAGGC CAATGAGCIA CCGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGITCAAC
TTCGAGAAAT GGAATGCTCG CATCACTGAT CIACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT
AAAAGCCAAA GGTCCGGTGA CGATCCCGTA CCCTCTTTC TAGTCCATG TTGAAGATCT TTATGTAGAA GGACTTCCTG
AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTCG
TTT

SEQ ID NO:1452: (Length of Sequence = 353 Mucleotides)

TECCIAGAGA GOGGCOGGGA TITAGAGAGC TGITCTICIG CCTATCIGAT CGCCICCTCA GACACIGATC TATIAGICIA
GIGCIGCAAT TACTIGGATT GIAAIGITIC CITGCAATIT TIGCITTICA AATTCITTIC ACCCTAAACT GIAAATACGC
CAGGAGIAGG TAAAAACTTA CAGGIAAACA TIGCCAAGAN ATAAGGATIT TNATGICTIC TGCICAGIGG CATAACTCAA
ATCACAIGAG ATAGATITCT TIGCATCIGT CCATIGIATI TCICTGAGGC TAATITACAG CACTITGICA CGITAGGNAT
TITTTITCCC CAGIGCTGCT ACTCICCAAC TGG

SEO ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTTGCCCCTN CTGTCTTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGNAATTNAG TTGCACCATT TTATTACAGC
TGAAAGANIT GANTGTAAAG AAGGAAGTTT AATAGANCAT ATAATNCAGC AGATTTATTG ATGGGGAGGT ATCTATTGTA
GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCTTTAAAA AGAGGCCCCAA GAGTTAGTAC
CTCAGGATTT TGTTTTCT

SEO ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTTGCTCTGT CGCCCAGGCT GGGGTGCAGT GGCGCGATCT CTGCTCACTG CAAGCCCCGC CTCCCAGGTT CACGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCACG NCCAGCTAAT TTTTTGTATT

TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC CAAATTGCTG GGATTACAGG CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA AAGGAATT

SEO ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCCGGCCAT
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC
TGGCCAACAT AGTGAAATCC CGCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCTG TCCACAGCCC CCACACAGAC
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG
AAGCAGGCTC ACTACCAGGN TA

SEO ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCITIGACC TATTAGGIGA ACAAATGAAC CICACAGGAC ACACAGIAIT TITTAAAGGC AGACTCGCIC TCTTITTIGC CAGINAGCAG TICTAGGIAA CCAAGITACA CACTGIGGGT ATTCCTGCCT GCCTCTTGAA TACAAAGGCC TAGITCAAGT GITGCTTTIT TNATTICAAA TCAATTTTIT CITCTTTCCT TTTTGAGATA AAACTATTAA AAGTACTACT ATATATATAA AANCICAAAT CAACTTTTCG GCCTCCTCCT CGTGTACCAG GGAGTATATT CTGACG

SEO ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATICAT AAGTAGAATI TATAAAGAAC TOCAAAGAAT CAATAACAAA AAGACIGGCT ATGGCCTICG NAGAGCAGCT GCTGTCCTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATICC GACATCCGTC CTCCTGCAGG TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NIGAAGGAGC TTGTTTTCCA TCTCCTGGCA GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEO ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT
CCCTACCTTC AGGTCGGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT
AGAATCCGGC TGGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCCTAAA AACCACCCAG
CCGCGACACA AACT

SEO ID NO:1459: (Length of Sequence = 343 Nucleotides)

SEO ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATIGICAACA GIGITITIAT TIATACCTAC AAAAAGAAAA CAAGATGATG GIATCAAAAG GACAATTIAC AAACTAAGAA
TAGIAACATA GCITICAGCA TCCIGIGCCI GANCATCACA CATCIACAAG TCTITCAAGI CITAATGCAA CAGGAATGIN
TCIGGAGACC NGCAAGAACA TCAATAGAGA GCACIGATCC CAAGCAAAAG CCACITAACCI TITAGATGAG AAGTCCNCAC
AACGNATIGI TAGGGAGGAT TIGGGAGAAG CAGCCCCTIT GCITAATACA TINGGACCCC TITCCCCTAA GITGAGGITC
AACCCITGAA TGCAATAACT TGGCATAA

SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTTCTG TCCCCTCCAG CGCTAGATCA ACACAGTGTT AAATTAGTTG AATTTCAGTG
GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTCAGAC TTTCCCCAAGT TAAAACCAGT CTTGAGTTAC AGATCAAGAT
GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCTTTTTTT
GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA
ATCTCCACAG GACCCAGCTG TGT

SEO ID NO:1462: (Length of Sequence = 335 Nucleotides)

GECATGGAGC AGGCAATGAC TTGITCATAG TCGCTGCAGT TATGAGCACC AGCTTGAACT TAGGAACTCT TATAAATTTC
TGITTTCAAC CAAGIAITGA GTGICTGCTA TGTGICAGAC ACTGCGCTAG GTGCTGAAAT CTCACTTCTA CTGAGGAAGA
CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA
GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCCTCA AGGTCTNATT GCAAAGGTCA
TGTTTTAGCT GTTCA

SEO ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCCTCA GGATAAACAC GAGCATGCCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC
CCGGGACCAA CACCGAGATG GACACCCTGC TGGTGTCTAG GTAGGAGTTG GAGTGCGTCC CGGTCTCCGC CAACCCAGTG
CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGCCAGATC TCGTCATTGG AGAGGAGCAT
GAAATCCTTT CTAAAGAAGT TCACCGGCGT CTCACACTTN AGGTCGCTCA TCAGCACTTC GGAACCCAAG CNITCTGNCC
ACTTGCTTGA AAGGCACAAT TGINCAGGAG CACINCCAGG GGTTTCCGTG GAGGGTCTAT CT

SEO ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCOGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC AGGCCCTGGN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCCGTCTN TAGCCGNGTG GGCCACGNCC GGGTGGGGAC AGACAATGAC AAGAGGCAAG ACAGCCG

<u>SEO ID NO:1465:</u> (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCAT CAGAACAAAA TGTCAATCTA TTAGCAGATA ATATTCATCA GTATTTTTTIG AAAATACAAT ACCACANGAA AGAAACAGTG GACATTTGGA GGGCTTTGAG GCCTGTGGGG GAAAAGGAAT TATCTNCCCG TAAAANCTAG ATAGAAGCAT TCTCAGANAC TTGTTTGINA TGTGTGCCCT CTACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGGTTINAC CATGTINCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAAA GTGCTGGGAC TACAGGTGTG
AGCCACTGTG CCTGGCTGGT TTTTNITTTT TNAATGAACA TGTTGCAAAT CACGCAGAGC ACCININATT CTGCATTINC
TGGGTTATAA CAAACATTGT CATCTCTGCC TACATTTAAA AGGCTCTGGT GTTATTTTAA TATGTCTTTT CAATTTAGTA
ATTAATTCTA ATTTTCCTTT GAGCTGAGAT GTTATTCATT GTTCTCCTAG AGTTGCTTTT ATTTGTTCAT ATATGTTTCC
CTTAGCATGT TTTTCGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEO ID NO:1467: (Length of Sequence = 319 Nucleotides)

TGATAAAAGG AAAACGITTI GATTTATAGI ACCAAGIGCT TAAACACAAG GATAGIGITA GATTTTCGAG TGACTITCCT
TTTTGCATIT TTTGGCAGIA AAAGCCAAAC GITGIATTTG TCCTTTTCAG AGTIGICCAG CCCTTTTTTC CITTGTCCAA
AATGATTCTA AATAGAATCT AATAAACCAA TGIAGCATTA TTTTTTTCTA AATGAAGCCC CAAAAAAGAA AAGTGCCTTG
CATCATITAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TITGGITAC ATTCCAAACA TGIATAACCA ATTAACATG CCTAGGGITT TCTTITTAIT GGIATTCACT TCAGTAACIT GAATCCACAG ATATAAGCAG TATATAACCA GAAAGITACA AGTAAACACA AATTATACAT GCAAATTTCT GITCACAAAG GTCACATGIG CAGGIACATG ANITAGAAGC GIGCATCTAG GATTATGGCC AAACTGITTT AAAAATGCAG AAATGTAAAA TITACATCTIG AAAATATGAA GAGATGGICT ACACACTTCA AAAATCAAAT GITGCITATA CCAGAGATGT ATGTCAATCA CGGGNTTCAA GIGACAAGCA GTAAGGATCC TC

SEO ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CITGCTCTGT NACCCAGGCT AGAGTGCAGT GGCGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT
CAAGTGATTC CCCTGCCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TCNCACCGCA CCCAGCTAAT TTTTGTATTT
TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACTCCT GACCATGTGA TTCACCTGCC TCCACCTCCC
AAAGTGCTGG AATTACAGGT GTGAGTCACC ACACCCGGCC GGATTCTGTT AGTTTTCTTT AATGCATATT GAGTTTCTTT
AGTTTTAACA CACTTAT CTTGGTTGGA CCCAAACTAT TCACTATGTT TCTTGGGGGA NAGCTTNGAA TCTTGGGGTG
GNAGCCAATT TTGTAATAGC CAGGGTG

SEO ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTITGA GACCATCCTG GGCAACANAG GAAAACCCCG TCTCTACAAA AAGAAAATIT GGTITINATA TITATITGTA
TTAAATTITT TAGAAACATA GCTGGGCATG GTGGCACACG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT
TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC
TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG
TCTTGAACTC CCGGGCTCAA GTGATCCACC TGTCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTGCCT
GGGCCCAAAT TCATAGTCCT AAACAT

SEO ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCITAAAG CAAGANITGA AATACCTAGT TGTAAAGATG TGGCACCTGT GGAGAAGACT
ATTAAGTTGC TTCCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA
TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCTTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA
TCAATATAAC ATCAGCTTTA GCAGAAAAAA TTAAAGGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT
CTGCTTCCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCGCTATTT CC

SEO ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAACTCCTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC
AAAGTNCTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCCAGCA CTTTNGGAGG CAGAGGCGGG CAGGGAGTTT
AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCCTCT
AATCCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGGA GGCGGAGGTT GCAATGAGCA GAGACGGCCT
GGACGACAGA GT

WO 93/16178 PCT/US93/01294

345

SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC
CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCCGAGGG CTCCAGAAGC
TCTAGGTTTA CGGGGTCACC TTCTTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTN TCGTGGTTGC CATGGAGACC
GTCTGCTCAA GTTTGCCTTC AGAATTCAGC CTGAACTTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT
CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCTGCCCG TTCAACTCGC CCTCCTNCAC TTTCCANCAC GGCTGTTTTC

TTGGCGTGAC AAAAGGCCAC CTTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

SEO ID NO:1475: (Length of Sequence = 324 Nucleotides)

TIGCATACCT GIGCTGIGIC AGACCAGGCA GAGICATCIC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAC
AAAACTCCTT TGACTAGGIT TCATACTGIG CIGAATGTAA TGGAATCCTC TCTGCCCCCC TTATCTCTCT CICTTCACT
CTCTCTCAAC TAAAAATTGI CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA
TACAGICATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGNTACT TTGGATAGTG ATACACAGTA
TAGG

SEO ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACTCAAAA TCAGAGTGCC TCTCCTCCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG
GACAGAGAAT GACTITGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTCGAA
CCNATGGCAA AGAAGTTAAA AACTITGAAA AAAAATINGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA
AAGG

SEO ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CITGAAACIG ATTATGACTG INFITGAATG CATTITGATT CCTTAGCIAT GCCTCTCAGG TGAAAGGACC AATGGCAAGA GGAAGCAGAG GATTCATGCA CTAGAAAATA CIGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT ATGGTCTATT GAGGGAAACC TAATTAACAG TIGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAACC TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTTA TGGTTGATAA TTCAAAGGCA TAGATGAATT GGGATTCT

SEO ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCITICCC ATTOTEATAA TOTGECCATE ACIAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCCAGG CCAGCAAAAT
TTGCCAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAAGTCAA GCCTGGTATT ACGTTTTGTC AAAGGGCAGT
TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT
GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCCAT GGTACTACAG GGGTGCCCCAA GCTNCAATCG

TOGGITTACG ACATTACTAA TCAGGGAAAC CTTTTGCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNEC CGCCTTGCGG GGTTGAGTGG CCCGAGCTAA GGGTGCGGAG ACCCAAGGGC GGCGACTACG ACGCCGTTGA
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGGAAGATGA AAGGCCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG
GCGAGCTAGC AAAACTTGCC TATTTCAATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTC ACAGAATCAG
AAAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTEAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC
TCCAAGGGCC GGGCCCTGCC GTTGCCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCCCT AGCAAGACTT ATGAGGTTCC
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCCT GAACATTCAC TGCACTAGCA CGGNCCCGGG ACGCAGNCCT
TGGGAATCAG GCCGTCGGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCTGACC CCCCAATCCC
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACCTG TNCCCACTAA GGCCCCGTGG TATCCTGGCA GAAGCCTCTG
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAAACAAAA TAAGACCCTA CGTCCTACTA CCTTGAGCTT GGCTCTAAAA
CCACGGGAAA GGAAGAG

SEO ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTTT TGACTAAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG CCTATGATTT AGTTGTGTTA TGTATATTTG TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAATACT TCCTTAAAAA CATGTTTCTG ATAAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTGT AAAAATACCT CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCATTTCA AATACATGAA TCTCTTGTCA AAAGAGGTAC TTTGACAGTT TCATGGGAGG TCAGG

SEO ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAAACCT TAATGGGTGA TGAGCTTTTG CATACCAATA
TGAATTINIC AGCACTTCTG AAAACTGGCC ATCATTTTINC AAATTCACAA TTTGCTGGAT GTCAGGGAAC AATAGGAAGA
AGAATGAGCG TCAATTTTCA TGTCTTCCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAAA ACAAAGCACC
ATCAACCACA CTTCACAAAC AATTCATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA
GGGACTGCTG GGCATCACTT TCCC

SEO ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCCTAAAAG CAGTCTTTCC TACAACTTGT ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CITACATGGA
ATTAGAGCAC TTCCTGAATG GAATTAGAAA AAGGCAAATT GTGCATACTA CTGATGCATT CATTTCCTAC AGAGATATGA
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCCTGTCT CTTACCAGCC
ATTAGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC
ATTAATTATG CATTGCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

SEO ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAGTT TCTCACTCTC CTCCCACTIG CTATTGTCAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA
TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTTAG CTTCTTTNCC TGCTGGGAGA GTATTCCTTG
GGCACAGTGC CAAGTGTCTC TAAGAAACTA GTCATGCCTG ANCTTAAGGG CTCGCGGGATT CTGCGTGGTG GATTTCCTTA
GGCTTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTC ACGCTGAGCA GTCTGCACTN CCTTGGACAG
ACCCACTGGC ATTT

SEO ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTCAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAAGCAT GCAG

SEO ID NO:1487: (Length of Sequence = 298 Nucleotides)

TIGAACCCAG GGGCAGAGA TIGCAGTGAG COGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT
TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG
GCCCTCACCT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACTT CTAGANCCAT GAAAAATTTC TGTTGTTCCT
AGCAGNCCAA ACAGAATTAG AACCATTAAT TTCTATTTCT CCTTTAGCTT AACACTGG

SEO ID NO:1488: (Length of Sequence = 343 Nucleotides)

TIGCTAGITC AGGMICAATG TCATGGCTGT AACTAATATA GTACATTCGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT
TGCTGGGCTT GCTGTGCCTC AMCTGGCTGG TTCCAATCTG TGGTTGTGGT AACCATGCCG CCCACTGCCT GCCCACTCTC
CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TCGCTCTTTT GCCCAGGTTG AAGTGCAGTG GCCCAATCTC
AGCTCACTGC AACCTCCGCC TMCCGGGTTC AAGCAATTMT CCCCACCTCA GCCTTMCGAG TAGCTGGGAT GACAGGCGGC
CGCCACAACG GCCAACTAAT TIT

SEO ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCITIT TATAACCCAA GANIGCCATT ATTACACCCG GAACCCTCAC CAAATAAGIA GGAAAACTAC ACTGAGAACA
ATTCGGCCCA GCTGTCTCIG GCCCATTTCC CITTCTACCG CCTCTTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT
TCCAGGTGGA AAGATGGGGA CITCACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGIATCCTTC
GTTCCTTTAA ATGTCGTTGT TTATTTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT
TAATTTTTTA GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC
CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCITCIT TCATITAGG CACCAGICT ATGGIACTIC GITATGGCAG CCITAGCAAA CTAATACGGA TTCCTCATCA
GGITCAGATT TINCTAAATA AAATGIGITT GIGAGGGIGG TACAAGCAAC AGIGATATAT TTCTTTAAGT ATTTTCCCCC
AGCCAAATTC CAACAAGACA ATAATGICTA ATGCACTGTC TGGIGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT
AATACCCAAA AGGGAATGAA GIGAGTCATC ACCACAGCCT GTGAATGAAA ATAACTGCTC TGAGGAAAAC ACATGTAAAA
AATGACACCA TGTGGATTAA ATGGGGGAAC ACAAGT

SEO ID NO:1491: (Length of Sequence = 335 Nucleotides)

TTCACTACCA AAACCAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCATTC CAACAGCATA CATGANTTGG CTGTCGGTCT GCCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG GATTTGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCCTG ACTACCGNTT GGCTGAGGGA TTGTNTAATA GAATGCCACA NAACCAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC AGTNTCTCAG GTGGG

SEO ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTICATAA AACATCCITI ACTATATITI NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNITTAATGN
CITATAAGCAA GNCAAAGCAA TAGAATIGIG CITCITTIGC AGACIGGGGN CAATGAAATG TITAGCTACA ATTINCCCAT
ACAAACATGA AACAATATIC ATATAGANITA ANCACCCTCA CAAATAACTG ATGGGIGATG ANCACACACC AAGITCGACC
AAAGCAAAAA NIAAACTGAA AATTGITGGG TGGGGTTATT CATATTITAA ATTCAACATG CITGCTCTAT TTAAAAATAC
C

SEO ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGACCGA GEGGACAGAG CCCAEGGATG GAGGCCGGAT GCGGGGGACA GAGCCCAGGG ATGGAGGCGG GATGCGGGGG AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG TCCACTGCCG CAGATGGGCC AANCNGAGAT GGGACTGGAA ACCAACCACT GCATTTAGCA TCCTGGGGNC TGCTNATAAC CTTGGTTTGA TGGCTCCTCA AGAAGAGCCCA NAACCCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG ACACT

SEO ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGITGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC
AGTCIAAAAT TTATACAGIT CAATATGTGT CATTTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC
AGTAAATTAT CTAGCAGTGA AAATCACTIT TTAGGAGAGT CGCAATCAAA CATTGTTTAA CGTGGGAGCC TATAAAGATG
CAAATTCCTG AACAACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA
AGATCINCNG CINTTTACCG GCTTTGTCAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG
CTGCC

SEO ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGTCTT TGTCTGGCCA TGTGGGATTT GACAGCCTCC CTGACCAGCT GGTCAACAAG
TCTACTTCTC AAGGATTCTG TTTCAACATC CTTTGTGTTG GTGAGACAGG CATTGGCAAA TCCACGTTAA TGGACACTTT
GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC
AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT
AAGCCGNTAG TAGGNTATAT TGATGCCCAG TTCGAGGNCT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GICICITIGGA GCAAGGACCC AGITATICAT CITAATICIC AGGGGAATCI CIGITAGAGAT GAAAAGCAGG AGAACCAAGG
CAGCCIGGIC TCCCIGGGIG ATGAAAAACA GACTAAGAGC AGGGACTIGC CICCAGCIGA GGAGCITCCA GAAAAGGAGC
ATGGGAAGAT ATCGIGCCAC CIGAGAGAAG ACATIGCCCA GAITCCIACA IGIGCAGAAG CIGGIGAACA GGAGGCCAGG
CIACAAAGAA AGCAGAAAAA INCCACAGGA GGGAGGCGGC ACATCINCCA IGAAINIGGA AAGAGITTIN CICAAAGCIC
AGGCCITAGI AAACACAGGA GNAINCACAC IGGIGAGAAA CCCIACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

CACACACATA CAAAATCIGT CCATTIGCCG GAGNAATNIG TATGIATGIN AGTIGGAGGG TATTAAAAAT CAGTITTATT
CCAAAGATIT AAAACIAGAC ATGACITAAA AACAATTICT GGAGCACIGC TIGCTGACAA TCTCGTAGTI CTCTGCTGCA
TTTGAGTGCA TTTTGIGGCC AGTCCATCAG GGCGTACCAT GGGATTATAT TTGAATGIGT GGTGCATCCT TCCTGGATGA
AGGATGIGG AGGGACCITG AACCTCAGCT GTATTAAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC
ANCCTGAATT CTGTTGGGTC CNITCTTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEO ID NO:1498: (Length of Sequence = 281 Nucleotides)

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TITIATCACA COCIGITITO CAAGGGICCI GITACGIACC ATTCACCATI CIGCITAGCA ATGGCTIGIG AGATGGCAIT
TATICCTICA GCAIGIATIT INATGITCAC CITCCICICA CCIAAATICC TCCCCCACCC CAATAACAAT TAGITGITCI
ATTIGCATGI AGCCAGAGCA AAAAATGAIT TCTITCCCIT AAGITACTAT TATIATAAAA GGGACGATAA ACACATGAGI
CATIATACCA CAAGIATAGI GIGGAAAGGA CICTAAACAT AGGCICACTG AAGAAGGIGG CATITGGGCC AGGGCTCAAA
ATAAGGCAGA TTCAGATTIG AACTGAATAG ATGGAGGAGT CATITCAAAC AGAAGGAATG NCATAACATG TGGAG

SEO ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGIAAGN GITCCCAGIC GGTCCCACTG GICACAAAIT TINIGGCACC GATCATTGAC ATTCACAGGG TCGTGATAGT
CCAGITCATT GAGCTCCTGC GCGATGGCTG CCACTCGTC CACGCGGTCC TGGTGCGCTG CCAGGTCGCT CTCGAACGNC
TCGTGCTTCC GCAGCAGAGC CCGAACCTCT NINAGCGACG CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC
ATAAGCCCAA GTCTCGTGCG TTGAGGCCTT CT

SEO ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG
GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCCG GGCGCCCACA CGGGGGGGC TGAGAGGCCC
ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGGACAC CCGTCACCAG GAGCCCACCT CCGGGGGCTC AGNTCCTCCC
GGCACCCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTTG
CTAGAAAGAG CTGTATTTGA NCCINGGTTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEO ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGITGT CACAGAATCA GAGATCCAGT CTCACTITTC CACAAATCTC CAAATCTCCA GTCTFATCTT
GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAACTCTT GTTTTCAAAG CATGGGGCCT GAGTGTTCTC CACTCCTCCT
AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC
TCCATTTCTC AGTTACCATT ATTTCCTGTA TCAGCTTTGT CCTTCCTGGN GGGATGCACA GTGATCCGGG CCACCACTGT
TGTTGTCTTG TGCTTCTGCT CTTTCCTATG GTTTCAGGNT ATTTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGINITIAA AGAGGGTCAA GIGGAGGIGC ATATICCAGA GAATGCTCCC GIAGGIACCI CIGIAATICA GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TITTTGGIGC CCAGGTCGCC CCIGCAACCA

AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANTTCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTCAC AAAGTGNCAG TGCTGGCTAG TGACGG

SEO ID NO:1504: (Length of Sequence = 311 Nucleotides)

SEO ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTGTGCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG
GAGATAGCAG GCTCTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA
CTAGGCCATT AATGAGGGAT TCGCCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACCNTAG CAACTTGGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA
TTTTNTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEO ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTINT CAGCAAAACC TNGTAAACTT TGACGTTAAA AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAAAGG TTTCTAGTTC ATATTGTTTT GCTAAAA

SEO ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TITCCCCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAAGA GAGCCCAAAA
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT
TTGTGATTTG CTAAATTTGA GAAGCCATCA CTTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA
TGTCATCTAT CTC+ACCTCC ATCTCTTTT CAAACTTCGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA
GTTTTGCAAG ATTGGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATTGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG
ATGGCTAACA GGTTCTNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCCACCA AGCCTTTCTT
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAACCAAA AATACATACA CCTCCTTTCC
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCTTTGTCC CTCACACTGA GCCAGGGCCT GNCTTAGATG ATGAAATGCA
TGGCCT

SEO ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATEGGTC CCTTEGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT CACATTTTAC TGCAATATGT GATTTCCTGG TGAGACTCCT TGTGCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT ACTCGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GGNTATTTNC TTNCTATTTT GAATGGTATG TACTGTCTGT GTGTACATA

<u>SEO ID NO:1510:</u> (Length of Sequence = 247 Nucleotides)

TAGGAAGAG TAAGANCTIC TITINCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG AGGGTTT

SEO ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTIGCTC CTTIATIAAC TGINCITCCT GIAGIGIGIA TITGGGATCC ACIGGGAATC ATAGAAAGGA ATCAGIGCTA
GGNICIGITG GGATIGCACC CTGAGGGATG TGGCITIGGC TICTCTATCA ACCITTCTGI TCCCTTGIGC TATAGGAGTT
AAGICCCTTT NATGCCCCCT ACAGIGGATT ATAGCTATGG CCTGIGGCAG GIGTATTGIT TACAATAGCT GAAGAATTTC
AGGCCCATGC TTTATGGGGG AGGGTTTINC TAGCTAGTAG TCCCCTTTCT TTCTAGATTG CAGCATAAGC GIGAACCNCC
AAGGAATGCC ATATTTTAGA ATCCTGINAT AGGATGGITA AGGCTTTTT

SEO ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAG AAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAAAATTGG TTGAGAACTA CCGTGTGACG
TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACAATA TTCTAGGATA TATTTAAAAT ATATGTATAT
TTTGATATTA AGGGAATATA TTTTGTTGTC ATTTTACAAT GTGTAACTAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CICAGTGTTG GAAATATTIT NATATTGCCA AGACCATAAT GIGAGGNGTG CAGCTGCATA ANTCCCTGAG
AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTTGTTGGCT GGGCCCAAGG ACAGTCAAAT GICIGCCTGA
CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAAG GGCAAACAAC CTAAGGCTGN
TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCCTCAG
GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCATTCA TATACTCATT CATTCAGCAA ACATGCGCTT GACACCTTCT
GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TINNOCAGGO TOGTOTORAR CICCIGGGOT CARGINATOC GICCACCTIG GOTTOCORAR GINCIAGGAT TACAGGCATG
AGCCACTGIN COTGGOTAGA ARAININTIT TIRARAGINA GGATGTAGAR TINCCTAGOT ATGIAGGCAR GGCAGGAGGA
GAGGGGCCCCA GITGGGAAGC ATAGCCCCACA AGAGTATGAG GGCCTGANCO AGGATGGTGG CAACAGGGAT GGAGAGGAAG
GCGTGCCAGG GCATGGTGGC TOACACCTTA TAATCCTAGC ACTITGAGAG GCTGAGGGAG GAGGATCATT TINAGCCCAA
ARGITAGAGA CCAGCCTGGG GNARCATAGT TAAGGACAC

SEO ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGCCAAGAN CTGACCCTTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA
GGACTGTGTG ACTAATTCGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAAACTG GTGTAGGTAG
TGCTGGCCAT TGCTCAGAAC TTTGTTGTGAG TTGAGCCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTTCTGAGA
ACCACCCTTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCTGTGAGAG
AATAAACGTA TTCATTTAAA AAG

SEO ID NO:1516: (Length of Sequence = 380 Nucleotides)

TITIGCCITA TICIATOGA TITITICCCI AASCITCTAC CIGGNATITIN CCITIGGAAA AGICTCTGAG GITCCACCAA
AATATGGAAC TINATITIGG ACACITIGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGGNIT
GCCTAGCCCC ACTCACAGCG CCCACTGIAG CITCTACCGA ACCAGAACCI TGCAGGCACT GAGGIAATGA GAAGAAAGCC
AAGAAGGIAC GITTCTACCG CAATGGGGAC CGCTACITCA AGGGGATTGI GTACGCTGIG TCCTCTGACC GITTTCGCAG
CTITNACGCC TIGCTGGCTG ANCTGACGNG ATCTCINICT GACAACATCA ACCTGCCTCA

SEO ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG
GAGTIGGACCT CTGTTGTCTC AGTATTAACA GTCCCTTCTA GGAAGTAGGT AGCATTTCTG AAAATAGAGT GAAGCAATTG
ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAACTAG GTGCTATTTT
NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC
TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCCT CTAAGGAATT NACCGTTCTC
ATAGTGTGTT T

SEO ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTCC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCCTCAGG GGAGGAAGTG
TGTGCNAAAT GGTCCGTGGG CAAACATGGG CGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCCAGTCAG TAGGATCAGC
AGTCTGACAC CCAGGCTTCA GGCCCTCCCC GACTTGAAGG TGGTGCTTCA CCAAGGACTC ACCCACTCCT GCCCAGGAGC
TTGTNTGCCT CCTGCTGCCA TTTATGGTGC CCAGGCTGTT TGTNCCAAGG AGTGTCTGTG GGCCAGCNCT GAGCTGCCCT
CAGGACCCCC TTGGCCTCTT TTCTGTNCTC ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TIGGITAAGA CCAAAGTCAG ATCACICCCT CCTAGCTCCA AACCTGCAGT GGCTCCCAAT TCINICAGCA TACAAACCCA
GATCCTCAGG CIGCCATTIN TGGGCIGAAT CCTGICCCTG CIGICTGATC CCACCAGACA TAATGGAGGC CIGAGGITCC
CTGAACACTC CTAGITTAGC CITAAGTTAA GIATITGCAC ATGCTGGTTC CIATGCCTGA GATAATGITC CACATTINAT
CCCATTGCTT GCCAGAAATA GAAACCCTTC CACATAATIN CAAAACAGAG TTTACANCAC AGAGCTTTGG GIGACTGCAG
GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEO ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGITAA ATATGCCCAG GCTGAAAGAA GGTGTATAAT GTATGGACT NCTTATACCA AATGATTTCT TTGGAATTTA
AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGTNCT GACATTGTAC ACAGATGAGT
AGCACGTAAC TTTTATTTAG TAAGCCCCAT AGGATAGTAN GGNATAAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC
CATTTGCTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTC ACTCAAGCAA ACCAGAAAGT
GTCTTTTGTA AATACGCATT TTGGGCCTCA TCCTCATGGA GGTTCCCGTT GTTTGTTGG

<u>SEO ID NO:1521:</u> (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGGACTCAG ACTCAGGAGG TGACTCAAGC CTCAAGCTCA GAAGCCCTCT GINACCATCT
GTTGACTCAG AAGCATGCCC ACCATCCCAT GCAGTGCCCT TCCAGGCACT GTCCTGTAGC AGACGGAGTT CAGGCTTTGG
AAGTAGACAG ACCTGGGTTC AAATCACAGC TCCGCTTCTT CCGCCTGAAG CTCCATAACC TAGGATAAAG TCGCTAAGCC
TNCCCAAGTC TCAGATTTCT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT
CTGCATCCTC NTTTGCTTG

SEO ID NO:1522: (Length of Sequence = 405 Nucleotides)

GIGAATTICA AGCAATTGIT AATGGGGACC AACAGGGCIG CATTAAGAAA ACCACTIINN ACTGATCICT CCCCCACATA
TTITIAATTI GICTIGCIIT GITTATTITIG GITATGCAAG TCCTTTCTCT TCATGAAACA AGIGIAAGGC TCTAAGGCIA
AAATAATAGT TATTITIGIG GGCCCCAAAT AGCIACTTIT GAATTTCITT CTTTAGIATA TCTCAAATCT GGGGAACATG
GAACITGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTITICACA GAACCATTIT CTTAAAAATA
AGGGGGCAAT ATCCAGATTC ACATGCATGI TCATAAAATAA AGCITTGGIT TTAAAACAAA TCCACACCAG CAATTATTITT
CAGCT

SEO ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNICACAGA ACTOCAATTO TITATIAATO ACAGCITECT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA TATGCAGGCA GCAACCITCA GGAGITGGGA GITGGGGAGA AACGNCITCA AAACTGCGAT AGGTACTTAT GGTGGGTATO TGGTGATTCT NAGITGGCAC AAATGCCCTG CCTAGCCCCC TTAACTGCGT CACTITCACA GATGGNGTGT TTTGTTGTTG GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGAAGAA AGAC

SEO ID NO:1524: (Length of Sequence = 299 Nucleotides)

GIGCTIGIAC GIGACAGTIT IGICIGATCA CATTITAGGA AGAIGATGCT GITCTINCIT CITAAGTATI TATTITNATC
AGICAAGIGA TAGGAAGTIC AATTICAAGT ACAAGACATI TGGATCAAGA AGIGACIATI ATTITATITAT TINAGATGGA
GICTIGCICT GITGCCCAAG CIGGAGIGCA GIGGIGIGAT CICAGCTCAC TGCAACTICC TCCTCCTGGG TTCAAGCAAT
TCCNCTGCCT CAGACTCCCG AGIACCTGGA ATTITACAGGC ACCCACCGGG ACCACTGGA

<u>SEO ID NO:1525:</u> (Length of Sequence = 398 Nucleotides)

GCCCATGAAG CAGCTCTCGT GGATTGGAGT CTCATGCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCCTACA
GTGCTGGTGT CTGGGCAGTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCCTGGTGAG GGATCTCTGT GGTGGCTCTG
TCCCTGTNAC AAGTTTCTGC CTGGGCCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC
ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTGCTCTCTG
GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCCTGA GGGTGGCC

SEO ID NO:1526: (Length of Sequence = 318 Nucleotides)

GICTCTCTCT ACTGCACCAT GATGCCTTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCTIVIA ACCCAGCACT
TTGGGAGGAG TTCACTTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGGAC CCCGTIVICCA CTAAAAATGA
AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT
GAGCCCAGAA GGTCAAGGCT GTAGTGAGCC ATGATTIVIGC CACTGCATTC CAGCCTGGGC AACACAGTNA GACCCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TIGGCIAGAA GGGAGGCIGG AGCCIITCAT GGIGGCITIT GAATGCCATG GIGAATAGIT TGICCITIAT TIGINATIGA ATAGCAATIT GIACACITCI GAGCIATIAG AGIGAAATGA TIAAGCCIGI GGITIAGGAA GAAAGAGCCI ATIAGGGAGA TAAATCITIC CCIAGITGIA GGAAGGGIIG GAACAGIATG ATATGGAGAG GGIAGIAATG AATGANGGAA TINGAAAACGA GAATAATTIC AATGATACIG GAGGIGCAGI ATACAAGIIG NGCAGIAGGI TIATGICIAG GAAGATAAGA AGI

SEO ID NO:1528: (Length of Sequence = 405 Nucleotides)

3.

GCCGTCGCTA CCGCCACCGC CACCGCCACC GCCGCCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAG AGCGCGAGTC AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

ATCTAGACTC CCITGIGCCC TCACTATGCC AGCGGAACTG TAGATCATAG CCAAAGAATT TGIGAAGITT GGGCTTGCAA
CTTGGATGAA GAGATGAAGA AAATTCGTCA AGTTATCCGA AAATATAATT ACGITGCTAT GGACACCGAG TTTCCAGGIG
TGGTTGCAAG ACCCATTGGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTC GGTGTAATGT AGACTTGTTA
AAGAT

SEO ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTICTIGC CICCATAATI CAGACAGIAA ACTGATCGCI GAGATIGAAG TITGCITGIT TCCIGGGGAA
GCTINAAGAT CCTCGIGGGA CCACCATCCC CIGCICAGIC CICCCIGGAA GGGGGCACIG GCIGGGIATG AGCCGCGICA
CCGITGGGIT TGIAACITIN TGGATGGIGC CICGNITICA CCTGGGGCIG GCIGAGGAAA GGGGAGGCGG TAGGNGICIG
C

SEO ID NO:1530: (Length of Sequence = 356 Nucleotides)

GETCTCATEC AAGGETTTCC CATECCTGTA AGTGTGTTTG TAATCCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTTT
GCAGTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCCTG GGCCCGTTTG TTGTCGGGGG AGAAGACTTA GACCCTTTTG
GGTGAGTACT GCTGGGAGG TGGCAGCAAC ACAACTTGCT TTTMTGGCTT TTMAGCCCCA GCTCATCTTC TAATTTMAGA
GTTTTCGGTC AGTCTCTTCC TTTGGGAGIN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT
GGCCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEO ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGIT TCCTTCAAAA TTGTTAAACA TCTCTTGCGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG
GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCAG
AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTCAGAT TGCTGGACTT TGTCATGATC TCGGTCATGG GCCATTTTCT
CACATGTTTG ATGGACGATT TTATTCCACT TGCTCGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT
TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTIG AGCCACCAAG AAGIGGACTC TGCCTAGGAA GACAGITTGC TGAAGITAGA AAGIACTGGI CTAGGAACCA
GAAAACCIGA TICINCCCAA GAGITAGAAT TGINAGINAG TICINCTGG TITINAGITT CCITATCTGI AAAATAATTA
CCCAGITCAA TIGGATAATC TCIATGATCC CITCCACATI CTGCATACTT GGATATCTAC TGITTCTAAA TATITTGGCA
TITCTTATAA AGCCCTTTCA CATITNCTIT ATTATITTTC CCTCACAAGA ATTCCTGAAA TAGGATA

SEO ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGCTTTAT TIGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAAA TGCAAACATA CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCTTTTG ACAGCCCAAA GCTGAAACGT CAACTCTATC TGGGGTTACT TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGI GGGIACIACG THIAAATATI TAATTATTIT AAAAATAAAA TAGGAAAGAT AAAATAGCIT AAAGIGIATT GATGCICTGA ATAACITTAT GAGTGAATAG ATACCGTAAAT TIGAAGICAG TGITTIGCAC AACAAATCAA GATTIGGGAC TGGACTTACT GGGITGGGGA CITCITAGGG ATAACCGTGG TGCTATGAGC ATGCIGGAAA GATGAGAAGC AAAAGCCTGG

AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEO ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGICAGIC TITAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG
AAATACCATT TGTTAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCICTG TGIGGCTAGA
ACITTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG
TAAGGCTTGG GCACINIGGA GCCCATGAAG GITTTTGGAC AAGGGAGITT CCTTAGGGAG GAGTATNAAG CCATAAACCA
AAT

SEO ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATIT TTACIGCATC TNCTCCACGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA
CAGGTTTTTC CCTTCCCCGT CATGTACATT ATTTATTTTT GATCCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAAA
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACGG ATGGGGGTGG GCGCGATTCC CACAACAGGG AGTGGAATCC
GGGGAAGATG ATATATAGGG GCAAGACGGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAAA

SEO ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGC GACTGAAGCG CGCGAAAAGC TGAGGCGCCA ACGTCGGGGA CGCCTGCNCG GGACGGCTCT GTAGGAAGGA ACTTGGTTCC CCCTCCCTCA GCTTCCGCCC CAAAAGATTC AGAATGGACA GTTTAGAAGA ACCTCAGAAA AAAGTCTTTA AGGCTCGAAA AACGATGAGA GINAGINATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT NTTGAAAACT TGATGTCAAG CTGTTAAATN GCAACCATG

<u>SEQ ID NO:1538:</u> (Length of Sequence = 310 Nucleotides)

ATATITCCTT CIGCICIGAC TCCGGAAGAA CITGCACTGT TGCCIAGGCT GATAATCCCC GAAAAAAAGT AACAAATGCA
ATINIACCCC CCACCCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGGGAAA AGATCATGAG ACATGTCTTC
TAGGGAAAAA AAATTCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC
ATAGAGTTCA ATTAATATAT TTCTGCTCTA TGCATGGATG CIAACAGGTT TAAGGAAACA CAAAAGCCAA

SEO ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATITIAC TITIGIAATOG AGIAATITAG CCACACTCIT GIGAGGGAAC AAGCCAGAGC CAGGACOGCA TATTACCOGG TAAAGCTGCA GAGAAGACTT GAGACITGIA AGATTGGNCC NGGCTGCAGT CCCGTGGTCA GIAACATCIG CAACATTATA CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAAATGTC TICACACATT GCACCAGTGA TICTITITCCC TGINCTCCTC CITTCCTGGG GAAGCTGCCC TINAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTIATICAS ATGAAAAAAA ATCAAGGCIT AATTIAAGIA ACTIGICCAA GGICAAGGAG TIGACAAGIG GCIGAGCIGG
AGITCAGCAT CICAGACATC TICCITIGAA TCCITGCCIT CCTIGIGAAT TICAGATGAC GGAGCATGAC GGCIGCATGA
TIATGGGGIC ACCGGGCCIG TCCIGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCCAIC AGCIAGIGAA
AGIGCAATTG GACANIGATC CIGITICCGG GNITAACCIT CCGCITGGCC TITAAGAGGG NITCITGAAA TGCACCAAGG
GGGCCIAGAG GAAGCAAGCA AACINCTIGG ACCT

SEO ID NO:1541: (Length of Sequence = 403 Nucleotides)

GIGATGITAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT
TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTCGTATAA ATATAATACT TTTACCTTGT
TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT
TCATTAATTG CCTTTCACTT AACTTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA
CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT
CAT

SEO ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTITATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG
GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA
TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCCNGAAGG
CGGAGTTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG
GNAGTACAAT CCT

SEO ID NO:1543: (Length of Sequence = 329 Nucleotides)

COCCTGATAA ACCIATCAGA TICTGIGAGA CITATICATI GICATTAAGA ATAGCAGGG AAAGACTGGC CCCCATGATT
CAATTACCIC CCCCTGCATC CITCCCACAA CATGIGGGAA TIGIGGGAGA TACAATICAA GITGAAATIT GGGAGGCGGC
ACAGCTGAAC CATATCAGIC TGTATTATCT CICCNITITI CICCTTTAAG NGACTATACG NAGGIGTIGI TITCAGGGNT
TATACATAGG TATTCTGAAA GATGGGGITA TITTCTGTIT CANACITTGA CTAAGTGGCT TCTTTTGTCC CCTATGTGCC
AGAATAGCC

SEO ID NO:1544: (Length of Sequence = 313 Nucleotides)

COGAGATCCO TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG
GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCANCTGG CGGCACGGCG GGCGGCTGGC GTGGTGCTGG AGATGATCCG
GGAAGGGAAG ATTGCCGGTC GGGCAGTCCT TATTGCTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG
CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTNAA ATCTTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAAACCT GGAGCTAAGA ACITCATCTC ACTITIGACA CCCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG
AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTTGIT TAAAGTAGAG AATAAGGTGA AAAATAAAAC CTGGTACTCT
GTCTGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT
GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCTNTCGG TTGCAAGGCG AGTCCTTTGC TGAGCCCAGC
CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTCGAGG TTTA

SEO ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCITGAC CCTAAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTTGA CATTGCATTC CCCTCCTGGN TCACATCCAT GTTGGAATCA ATTTATAAAC TGCCTTCCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCTTCCT AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTTAAAGGGA ACACTGAACT CATGGCAGAA ATGGTGGAAA GTAGAGAAAT GAATAGAGGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC
TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATAT ATGTTATAT
TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA
GAGGCTCTTA GGAAATTATC TTCTTGCATA TTATGTTATA TTATGCTATA TTTTGCCTATT TCCTAAGAGC TCTATCGTAT
TATTTCCATT TATTTGTGAG GA

SEO ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACTATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA
TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC
TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC
AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA
AAATCTTGAG ACTAAGACTC ATGAAAAGNT CCAAAATAAT TATTTCGTGT GGCCCCTAGA AGACINAAGA GACATTINCT
TCGCCATTTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT
GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

<u>SEO ID NO:1550:</u> (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAAGAGG TITTGTACAG CAAAAGAAAC TGTCAACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA
TTCACAAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAAC AAAAAACAAA
CAACCCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA
AAAATGCTTG ATATCATTAA TTATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTTT CTTCTGTCTA GGVTAATTTA
TTTTAGGG

SEO ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA OCTACCIATG GCAGCICTCG COGTCGGGAT TACTATGACA GAGGATATGA TOGGGGCTAT
GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA
TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCACG TTCCAGATCT CGATCATACT
CACCTCGTCG CTATTAAAAGC ATGAAGACTT TCTGAAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGGC AATATTTTTIN
ATTGTCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TACGT

SEO ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTIACTGA AATAGCAAAA ACGIGGACIT TGGGATTICC TCIAACTGCI GCAAATTATA ACACAGAATT
GCTCAGIGIT AATACITGAN TIGIGGGGCC AAGICITCIG GCIGCCCIAG TTCTCTITIC TGGCATTIGA AAGCCCITGA
GCTAGCIATG GAGCIAATCT TIGGACAGGC TTTTTGGTTC CCAGGAATGT CATGCCTTIG AATTICCAAT CTATATATAT
ACAGIGIGIG TGIATGIATA NCIGICITIT CACTGIAAGG CACCINCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT
CAAGCAAATG

<u>SEO ID NO:1553:</u> (Length of Sequence = 304 Nucleotides)

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CCCTTGICCC ACAGCCATIT AAAAATCITC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGITAAAAAG
GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCITTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG
GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC
ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEO ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTGTTACTG ACCATGTTT TGAGAGTAGT GCCCCTAACC ACTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGGNCT CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC ATCAGTATTA CCACCATACAT CCTCCCAAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTTCCAGG GNTTTCTACC TTAATTATTC ATAATGATT

SEO ID NO:1555: (Length of Sequence = 326 Nucleotides)

GITTAAAAAC TGICCAAAIG TCATITIAAT TIAIGAAGGC ACCCAGAATA AGINCIAAIC TCATACIGCC CCAATATATI
INCIGAAGCC AATTCICIC TITAITAAIT TITACIGAAA ATAGCACITI TITCCICCCC CIGATAGTAC TGGGTAAIGI
TAGAAIGICC TCIAAAAATIC TITGGACCIT ATTTACATIC TCAAGAGNIT TITITAAATI TACCAATAAG AIGIGCTATI
TGAGGAATTA GACTITAGIT CAGITGIACA TGGNITATGI CIGCICATAT CATTCATGIC TGAGNCITIC ATTITATTAA
TATGGG

SEO ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TITAGGIGCT TIGTCCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TITCAGACCC AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TICTGTCTTT CTCCAAACCT CTGAAAAAGA TTCTGCAACT CATCTCACAG TAATTTGTTC CCTAATTTAC TCTTAGGAAA TTGTCGTTAA AGTCTGATTA GGTTAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT CTTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEO ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCCEAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA

AAACGGTGGA ATTAAACTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC

TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCTG AAGGACCATG TTCCCATGAG TGACACCCTT

CTGTAAAATGT GGTGGCACAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTTAT

SEO ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCCCCT TICCAAATGT ATTITCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG
TTGCCCCATT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGGN TGAACATACC CAAGCTCCGG AACCAGCAAA
TNITGTTCGA ACCCCGCTGA TGACTCCCAG GGGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG
NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEO ID NO:1559: (Length of Sequence = 246 Nucleotides)

GIGGICCGIT CICAGCCCAA CAAGAGIGAT CCITITAAGG TCCACACACG CIGCCTCTCC TICCICCGCA TGAGCCTCTG
GCATGGICCT TCCTCCAGCT GGCCCCGGGC TGGGCAGAGC CICCICCTGC CGGGGCCCCT GCCCACCCCC TCCITITGCCT
GGAGINAGGG TGITCATACC AAAGACGGAA CCATTICGCC TITAAAGAAA ATATATNCAG AAGCAGCCGC TGCCTCGNAG
CCCTGG

SEO ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTTAA GACAGGAATC TITTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG
TTTCATTTAC CACTATTCTT TAAAGINCTT TTTGATTTTA TGTTTTAAAT TTTTTAATTT TATATTTTGA GACAAGGTCT
TGCTCTGTTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC
CCATCTTAGN CTCCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEO ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CECAGTCTGT GCCCCCGTCC CCACCACCAC CTTCCCCAAC CACTTACAAC TECCCCAAGT CCCCAACTCC
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGNCA AGGTGTCCCC CGCCACCAGG TCCGACACCG
TGGCCACCAT GATGAGGGAG AAGGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC
AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEO ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCCG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCATTAA GGACGGAGGC ACGCCTCAAG GAATAGGTTC
TCCTAGTGTC TATCACGCAG TTATCGTCAT CTTTTTGGAG TTTTTTGCTT GGGGACTATT GACAGCACCC ACCTTGGTGG
TATTACATGA AACCTTTCCT AAACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA
AAATTCAATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCIGAACC TGICACCIGC CCGINAGIAT TICACATITC TATAGITTIT TGIGATICIG CCIGCATITA ATCATCATCA CCAACAAAAA TAGITCCTCT GAAGAATTAT TITATACTAG GATTCTCAGG NIATCTCCTC TCAATCTCTA TIGGGATCAC TCCACTCIGA CITGIACACT CATTTTCCCA CIGATGIAGC TGITCTCAAG TTAGAAGITA AGITCTCAGT CTCCATTTTA TCAGTCATCT CAGCAGCATT CATTATGGIT CAGGCACTCC CTCCTATTT

SEO ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGENIC AGITICATACT CIGGCAGITA ATTITATTIC CICTAAATAA AAATGGACAG GITAATTIAT TAAGCAGCIG
TGITATCAAT AIGGIACGIG TGIGINCTIG TATAGATAGA TGITATATGIA CATACATAAC TATACATTIT NCIGGACACA
TAATATTINA GGIGCCIATT GIATGCIAGA CACIGITCIA CCATCAGIAA AAAAGCACIG CCCTGITTTA CIGITGATTA
AAAACAAAAT TCIGAAAATA GIGANCAATG AGGCTTACAA CATTIGITAC AGGNIAAGGN ATCICAATTT AGGAAAATGT
TGICA

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TITITITITA TATTAGIGCC TECTITITAA AAGITTATIT TACATITTAA ATACAGIATI TITCTCATAA AAAAAAAATC CAGGAAGIGC CTAACICCAT GGITTCTATA CCATATGIAC ATGAAAGCTG ACAGAGAGCC TGACAAATGI TCTGGATGIA ACAGIATGAA CACCIATGAG CTGGGACTAC TTCTGANICA AAATTAAAAA ACACAAATTA AGCACTGCIT AAGAAAAAAA AAATCCAGIT TCTGAACAAC CAAAAGAGAA CAGGGITAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA GCACACAAAA ACTCAAACAN CCCATATGIA GTGAACTGIA TATACTGCAG TTAATGAAAA CC

SEO ID NO:1566: (Length of Sequence = 305 Nucleotides)

GCACTGTGCC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAACTA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGA AGTCAATGGA ATCCATGGCT TTTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTICCCIG GGGAAGACAA CATCACCAGC AAATGGATGA TIGICAACIG GGGAGCCATT GACICICCAC TIGATIGIGG GITGAGGITC INCITCAGCC TCACATAACA AGATGCCATT GCTTCCGGIG CTATACACAG CACTCTGAGG CITCITIGIC CAGGGAGGAG GCTCTTCTAC TATAACGIGA AAATCGIGAG TGGCTGITCC CAAGAAATTG CTGGCTGIGC AGCGATAATT TCCTTTGICC TGGTAGGAGA CATNCTCTAT CITCAAAGIC TTGCCATAAT TT

SEO ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTTGCAGTG AGCCGAGGTC ATGCCACTGC
ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCCGG AAAAAAAGAA CAAGGGCTAA NTTCAAATCA AATTTTCCCT
GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

SEO ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAAACAC TAACAGGAAC AACTCGTATT
TCCATTAATC AAGATTTAG TATACCAAAT TITCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTTGTATG
CTACTGAAGG GNAAACATCA TCATACAGCA ATGAATACIT CAAGGGNCTT GTTGATCTCT CTATTATTGA CAGTGGGGTG
TTAAAGTCTC CCACTATTAT TGTGTGGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGGC
TCCTCTTTGG GNGCATATAT AATTTAGGGT AGTTAGTTCT CC

SEO ID NO:1570: (Length of Sequence = 262 Nucleotides)

TECTARATGA TAGANGACAG ATTCAAAGIT GTAGITACTG CGTAACTITA TTTATGAGC ATTTTAGAAT AGGCAAAACT
GATCINITGI GGTAGAAGIA AGAAGTGGG TACCCTCTGG AGGAAGAGA TTINCITTGA AGTGGCATGA GAGGATTTIT
TTGGCTAATG AAATTATTIT NATATCTGAG TAGGGTTGTG GGTTACACAG TTTAGGCATT TNTCAAAACT CATGGNACCA
TTCATCCAAG TCCTGTGCAT TT

SEO ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGIT GIAGITACTG CGIAACITTA TITATGAGGC ATTITAGAAT AGGCAAAACT GATCTGTTGT GGTAGAAGTA AGAAGTGGGG TACCCNCTGG AGGAAGAGAA TITNCITTGA AGTGGCATGA GAGGATTTGT TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTTACACAG TTTTAGGCATT TGTCAAAACT CATGGAACCA TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GGAAAAAATA CTTAATTATA ATTATAGCATT TATCAATTAA AATTATCCCN TTATGTAAAAA ATTATTTTATT GGNTTGGTCA AGATTCATGA TTGCAAACCA CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GITTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG
ACAGGAAACA TAGGAGGACA GITTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGIN TTCCAGTATC CAGGAGCAGG
AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCCGATGCCA ATCCCTCCTC
CTCAGAGTTC TCTTCTCCAG CAAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

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GATAGGAAAC AACAATGTGT TCAGTCAAGC TGTCCAGAAC CAGNCCACGG CTGCACAGCC AGGNGTATAC AACAACATGA GCATCACCGT TTTCCAT

SEO ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGIT AGAAACATGA AAAAITCTIA GAACITTAGA TGAAAAATTA AATITACTAC TAATACCCAC CIGCAATAAT
TTCCCGIAGI TTGGGATCIA GGITTACAGI GCATGGCAAA AAGACTITTA CATCTCGAGC CACAAGAACT GGGGTCCITG
AAGACAAAAA CACTTCAAAA TTTCTITATAT CICCATCAAT TTCAAGAAGI GGCTCAACAT CCTTAGITGI TGGAATATTC
TTTGATATTC TTTCGIAGAT GGITTTTAAT GTCATTTGAT CICGAATACC TTCAGICTCT TCCAAATATA ATATGAGACA
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTITAAGC AAATGITATG TITAAAGACT GITTIGATGA AAACTITTAG AATTIGAGTTA GIAGCAGAAT ACATAGCIAA
ATGITACTITN CIACAAATAG AATGAGATAT TIGATITAAA ATATINCTIT CCTCTTGAAA TAGGATGITA GATAGGGACA
TCTCATTITA CCTATCAAGT TCTGAGTCIT GCTTTAGAAC TACTTCTTTT AACTTAATTN CATGCATACA CTGGAAGACA
ATAATATGGC TTTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAAATACT GCTTATACCA TATTGGGTAC
ATGCTGAATG TTTTTAAAGA CTAGCCAAAA CTGACATTTT TTAAAATTAA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEO ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTICAGCC TITOCGCGGCA TCTGCATGAT GATOGGTGTC AACCOGGGGG GCGTTGTGCA GGTTGGGGCA GCTGGGCTCT NAGGGCAGGC GCGGGCNCTG GGCTCGGGCG GCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA TGNTGTAGGC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCTGTCTGG GCCCTGATCT AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEO ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTITATGAAG TAGTAATTCC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGGNT
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG
CGAGAAGAAA ACCGGTGTTT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GTNTCCCAGC AGACCCAGG

SEO ID NO:1577: (Length of Sequence = 320 Mucleotides)

CAGACTCTAC TCAGATTTCC CGCCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG
CCTCCCCACC AGGTCTAGCT TTCATTCATC CATGAACCCT CACCCAAGGG CCAAGAACTG AGTTCACTGC ACCCTGGACC
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTC CTCTCCTAAT TTTNTTGCAT CCCCTCAGTG CCCAGCACAG
CTCCGGATAC AGGGCAGGTT CACAGTCAGC GTGTTCACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGITAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGGA GGCTGTGAGA AAAGGTAAAC CCCTTCTTAA GCTCATCTGC CCCTTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCFT AGCTATACTT TCCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCACT CACAAAG

SEO ID NO:1579: (Length of Sequence = 375 Nucleotides)

TIGGICCICA AGICCIATIT TAAAATITIG TCAATTAGAG GACICTIGGI TCICITGGIT GACICATICT CIGCIGATIT
GITCICIGIA CITGCAGCAA ATAAAGIGCA GICATTGAGA AIGINCCIGI GICACTGIGA TGIATCAAGG GATCITCATG
TIAATATCIG TITCICIGAC AACIGIGITT TATACTITIGI ACIGIAGCIT TCATTGGAGA AGCCCIGGGC TCATAAGAGI
GATTIGITGI GGCATTICCT TATGGAACAT AAGCTITIGA AATATACTIG AGGTAAATAT TCATGGGAGA CATCCAAATG
CAGTAATGAG AGTACAATGA AGACAGCATT TINGACTITIG GAAACCIGAG TICAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCIGATG CACCCATGAG AGGGGAGACA GCACTGTCGT CICTOGCAGT TITCCCTTAA CACTCCCTTA TCIGCAGACT TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCCAGGAT AGATAGGGAT GGGTAAGAAG CCCTINAGAA TGIGGCAGTA TGIGGCTING ACTTCAGACT TGTCAGATTA GGGGTTTTT TTAGC

SEO ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGITTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA
CATCCTTCTC CTTTGGGGAA GATGATGACT GTCGCTATGT CATCHTCTTC AAAAAGGAGT TTGCACCCTC AGATGAAGAG
CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCCAGA
GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGIN CAGCCACCTC
ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTCC CNTGGCCAAT
AA

SEO ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTIGA TTAAAACAAA TAATIGAAAT AAAAAATTAT GITTATNCIT ACATGTATGC CATGTAGCAC TTTAAGGAGA
TGAGTITATG AAATTCATGA ATGAGAGGAT GATGTAAGTI TAAAAAATCAT TATTTTAGTI GCTITATTCI NCTATTITAA
ATTCATAAAT AACACAGGIG GCCTGTATTI TGAAAAGAGC CCTTTCCTCC ATTTGANCIT TATAAACACT GAGGCAGTAG
GTGTAAAATA TTATCTCCAC TITATATTIG AAGGAAATGG GGGCCA

SEO ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTG TATTTTAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAAA CTCCTGACCT CAGGTGATCC GCCTGCCTTG GCCTCCCAAA GTGCCAGGAT TATAGGCATG AGCCACCACG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA TACTGCTTTA ATTCATTTTC CCATTGAAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG AAAGTGGCAG GGCTCTGAGT GTTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG GGG

SEO ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTIGI AAATCACTIT AIGTITCIGA GTAAGGAAGI AATGAAACAT ACGIACAAGI AATCAGTAAG ACTIGITAGA
CAGCIGITGI TCAGGATGCC TITAAAAAGGG CIGGTAATGC AGITACATIC TAACAGAGAA GICCAAACTA CAGGTAAAAA
CIACGGCTIG TACTGIGAAA AATGIGCAGC TITTCAGITA TAAAACTAGI TGAACACTGG TITACAAGGI AATCCGIAGG
AACAGAGAGA CIGTAGGAAA ATATTCCAGC ACTITGAGIT GIGTITTGGC AGCAGCATIT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

AAATACTGAT TTCAGACCTT CTTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG
AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGG GTGCGTGAGG AAGTCAGGAA
TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGG GCCAGCCTTN TTTGACAGGG
GCAGGGGAGA AAAGGCCAGA CTTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTTGAAG GGTAATAAGT TGAAGGAGTC
CACGGGCT

SEO ID NO:1586: (Length of Sequence = 256 Nucleotides)

GEACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TOGAGGTGAT CACCCAGATC AAGCTGCTGC
AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTTGGGGCC TGGTTCCGGG COGTGGAGCG CTCAGCGAGA
CINAGAGCTA CAACCTGTCG TGCGAGCTGG AGCCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA
GCCATTNTCA AGCGCT

SEO ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGIT TCTGATTAAC ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTITIGA
AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGITCC CTCAGATGTC ATCGTATCAG
AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGAAAATCTG TTATCATCAA
CAAGAACCAGC AGCACCAGAA TNITACCAGC CAGTCTTGTC TNGTCAACAG GGGATTCCAA GGGCTAATAG GAGTNCAGCA
GCCCACCTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TOCATAATAC TOCTGCTGTG TTCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT
CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCT GCTGTGTTCT GTTTGTCCCT CACATAGGGT CACTGCTGCT
GGGTTCTCAG TGTTTCTCAC TCACATAGAA TTCCAGAACA TTCTGAATG GTTTTCTGTA ACATAGTATT
CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEO ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGCACA TCCAGGNGGG CCANTINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC
ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTTGCAG CTNGAGAGAAN TCAATGTTTA
CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCCTCGTGG ATCTGGAGCC AGGCACGATG GATTCNGTTA
GGTCTNGACC ATTCGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GECAACAGC CAAGTAGCAA AGATATAAGC AACAATCAAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC
AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TITTINCTGAA AAGCATTGGT CITCTGTACA GAAAAATAAA
AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA
TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEO ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTINAGICIC CGGCCTCACA ATTCAGCGAC TGCAGCTCGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA
GATGCAGAAG CCATTTGAAG ACCCCTGGTT TGCGCGGCGG ACGGGGGAGA TGAGCGGGAC AGTGTTCACG GATTCCGGCA.
TCCACGTCAT TGTCCGCACG GAGTAGGATT NGGGGCCCAG GCCTGGCCTC GGGGTTCCCC CGCTGCCTGC TGGCCAGTGG
CNGAACCCCC CANINCCTGC CACINTCACA CAGTATTTAT TGTTACCAAA ATGGCT

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SEO ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCCA AATTATGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAAACAGAA
ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT
TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTTA TAAATACAAT TTAGCAAGTA CAAGAATGCT
GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEO ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGITTEGI GATTCINITC TGIGICTECT GATCIATTEG CGIGAGAGC TGAAAGIGAC CAGCCAACAG CCATAACTIT
ATGITTAGIG AGACICATAA TGGGICTCCT GCIGGAAGAT CTCCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGITT
GAAGITGIAA GCATGGGAAA CACAAATTCC CCAAATAGGI CCAGATAGIG ATAGAGAATA AGACACTTAC TIGCCTACTT
CCATTTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTTGAGGTAT ACATTGCACG
GTTGAAGGAC AGTGCCTCAT CCTTGCAGGG GTGCCCTTIN CCAGTTGGCA CCACAGCT

SEO ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTITINCEG GEGAGGIGIA TGIAGATGAG AGICTATGAT ATAAAGCAGI AAAAAAAAIG CIGITGIATA GGGATGCAAT
ATTITICGGIG TAAGGAAGAG GITITAATIC ATAAAATAGA AAACAGGITG GAGAAGICTI TAGGAAAGGG ATACCITITG
GGTIGGCITT TGAAGGAGAA GITITATACCC AGGITCAAGC TGAAGGGCTA AGIGAGTAAC TGAAAGGGCT GAGCTATITG
GATTACCATG AGGAATTIGT GATGGCTGGG AATGIAGGGT GTGTGACCAG ATGIGGAATC ACAGAGGGAG CCCACAGAGG
AGCTTCGGCA CATAANCIAA AGAGITTAAT TIT

SEO ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TICACITACA ATGTAACAGA ACATTGAATA TIAGATICTG AGCATATICA
TGCAAACITC CACTITGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT
TTGGACTATG CTCTCAAGAT AGAAACITAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA
CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCCTGG GTNATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG
CTGCACCTGG GNCACAGCCT TIT

SEO ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGICAGITA TIGCIGCACI AGAGCIAAAT AAAAGACATA AATAICIAAG GCACITACIG GAATAAACAT CITATITCCG
CTAAGAGGIT GGCIAGGGAA GCICIGCITC AGAGIAIGGG TIGAGIATAA GCCIGINCCA CAIGICITIT GCICIGGAC
CAGGAGITGI GCAGCCCATC CITITCICAA GACAAAAGCI GAGCCAAGCA AGGACATITA AAGCITCACI TCIGCICACA
TCATAICIAT TGGNCAAACA TICCAITGGG CCAAAGCAAA TCACAIGGGC CAAGICAAGC ATCAGIAGGI CIGGGGGAAT
ATTCITTCCI CIACICTIGG ACACAIGGGA AAGGGTTAIG CATACIAATI CIT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATIGICCAT ACTIGATIAT TAGITICIAA AGAAAGIATI CITAATICCA AGCCIAATAG CICTTATGIC ATTAGITICT AGIGCAGAGA AATGIACTIG ATGAATTITT GITGACTITT TITTITIGCTA GCCAATATGA AGGITGCCAG TCCCTGCCAA AATCAGCACI AAAACIATIT TNCATGAGTA ATAACAATAA TATTCITTIT TAAATAGCAC CITTAACCCA AAAATCITAA GCCIATATAA ACATTCACTC AACANTACAC TCAAAA

SEO ID NO:1598: (Length of Sequence = 355 Nucleotides)

TGIATIGCTA ACTGICTITG TAACTAATIT ATGIATACNC TAAATCGIAT AGCATGICAT TITATTATAG TIGATTAACT
TTGIAATINC TGIAACTGCA TOGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAACC ATAGITGCTG TGGGAGACAG
TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GITTAGAGGA GTGGGGTTAG
ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAACTGAG GTTGGTAAAC
ATCACAAGAG CTAGTTAACT GGTGAGTAGC AGCCC

SEO ID NO:1599: (Length of Sequence = 313 Nucleotides)
GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GINCTGCNCT CAAGGACCTC AAGCGCANT

GCATTIGGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CINCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC
TINAGGAGCT GGTTCTCTCA GAGATGAACT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC
TACCGGGAGA TCTTTCGGGA AAAGGAGGAG CTTCGGCTTG TTCCAGCCAG GTCCTTATCC AGCAGNCCIN AAG

SEO ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGITCACAGA ACTOCAATTO TITATTAATO ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA TATGCAGGCA GCAACCTTCA GGAGTIGGGA GTTGGGGAGA AACGACTTCA AAACTGCGAT AGGTACTTAT GGTGGGTATO TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAACTGCGT CANTITCACA GATGGAGTGT TITGTTGTTG GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEO ID NO:1601: (Length of Sequence = 228 Nucleotides)

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GEAAGTCCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCCTG GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEO ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAT GGGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGGAT GIGACITATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT INNTGGGATC TCAGTACTGG GATACTGAGA TCCCAGGGGG AAAATATCAC TAAGGTTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCN CTTTTTCCTT GAAACCTCCA TGTGATGTTA ATTAGGGTAA ATG

SEO ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TITGIGTTCT GAACATAAGT NCTITGICAC ATAAAATGTG CTATGAATGT TGAGTTTTAA
ATACTCGAGC GGTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCCAA GGCGGGGGGT TCACCTGAGG TCAGGAGTTC
GAAACCAGTC TGGCAAACAT GGTGAAAACC CCGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGCGTGG CGTATGCTGG
TAATCCTAGG GTTCCTGTCA

SEO ID NO:1605: (Length of Sequence = 290 Nucleotides)

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GACAGACATT CAAACCATGG CAGGIGGCAA GAAGIATCAA ACTACTAGAT CCTIGGGATT GINCITIGIA CTGGGGTGIA
TITITINCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CINACCCATT TGGAAATGCA CAGAGATTCA
GGAGTGTTCA CATAGAAACA GAAGATCATT GGCTTTTGTC CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTTT
GATCTGTGTT TCTGAATGIN TTGATATACT GCGCCTACTG GGTGTGCAGG

SEO ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGGAAGCTGA GTGCATATGG TATATTINAT TCATTTTTGT AAAGCGTTCT GTTTTGTGTT
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATTAA
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT
ACGCGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEO ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCICCACTGA CCAGCIGITC CCTGTCTCTC CTTCTCCTTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAAATTTG
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC
AAACAGCCTT ACTACTAGGA TATGGGGAAA AGTTTTCAGC TTTGG

SEO ID NO:1608: (Length of Sequence = 294 Nucleotides)

CICAGGAAGC CICICITICT TCACITACCA TIACTAACTC TCCAAGCATA GAAATCCCTG GGAATIGCGA GAATAACTCC
CACIATITIA AAATTIATAT TCAGATTIGI TICGITICAT AAGACACATC AAACAGGCCT ATACAAAAGG TITAGGAAAA
GAAAACAATG GIGAGICCCG GCCCTCTTCG AATTCACTGG CACCTCATGC AAGINTAGGA AGGCACGCTG GATCGICTAT
CTGATTCCAA AGCTGICCIT TGCCATCTCA TCCCTTGGNC TGCCCCCCAA CCCT

SEO ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA
CCCCGGGTCC AGTTTGAGGA GGACTCTTGG CCAGATACAA GCCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTTN
CTCCTTNGAG GTGTCTAGTA TGAAANCTGC TTATTTTGAA ATGTGATTCT AGCCATTATC AGGNGCAACT GCAGATAATT
CCCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTCATA GGTCACGTTT
ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTCA TGCCTCTAGA GGAGAGAGA GAAACACATG AGG

SEO ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGICIGIATI TATTAAATIG CCITTACTAC TITTAGATGG CCATACGITT TCAAAAGCAA AGACCTAGTA AGCCATITGT
GTICATITGC TAAGCTATCI TAGGTACAGG TCCAGATTAT AAATGITACC TGCTAATCAG AGAGCAAATT TITAAATTAA
TCACTIGIAA ATCCACATTA AAAGAAAAAG AAACTTAGAA AAACACATAA ATTICITTIG TGATCCCACT ATTCAGGAAA
ATCCATTGAA AAAGCAGATG ACTTATCCGT GITAAATTIT TAAAGNCCCT ATTTAAACTG TCATGTAAAT TCTNATTTAT
CTAATTTTT AAAACACATA TAGNNITTTA CICTCCAGTT CCATAANTGN CTCANTTCTG GIGANGGTCA TTACAACAGN
CATTACGNGG GCATATCGGN MTAAAANGGC CNIGCGGTCC TGNATCNGAG GNGGGGTTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TICTACAATG TAAAACCCIT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA
NIGITITINI TIGTCATGCC CAATTATTIC ANCAAGITTI TATTAATAAC TIGCTACATG GTAGGCACAG CIGTAGGIGT

TEGAGATATA GAGGIAAACA AGTCTGACAT GATCTATECT ACCACEGAGT TCTTATTTIC AAAGTGGAAG GTAGAAAATA
AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCTGT GNGTGGGATA
AATAGATCAG CAACACCCA GGCCATGCAA TTTNGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG
AATCATACTC CCCCCTTCGG TCATCTNTGC CAGTTTCNCT GNGCTTCACC CTACCCTCCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT
GGCAAAGCTT CCAACATGCT CGTGTTTTCG CAAGCTATTT ACTGTTTTCC CAACCCCAGT CTCCTAAAAT TTGACAAAGT
AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAAACT CAACAAGCAA
TACTTCCTTC CTACAACATA CCCTGCAAAT CTTAACACTA AATTACTTTG TGTCTATCTC CCAAATCTCT AATGACACAC
AGTAGCAAAG NGTACCAAGT TCAGAACTTT AATAACAGNG GINATTAGGG CAGGTGTTAG GGCACTAGNT AAGNGCTTTG
CATCAGTTCT GGATCAGNCT TTTAAATAAC CCCTTAAGNG GGGNTNAGNC CCTTTTTT

SEO ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGREGAGAT TRGTTGIGGG CTAGGGCAGT CCAGAGGAGA GATATGIGGC AGGACAAGTC TCTACCCTAT ACAAGTNCTT

CCGGCAAGCC CTCAGCACAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATTGTTTTC AAATATCAAA

TAAATCATAT GTGCACATGC ACAAACATGC CTTCACAACT GAGTAAAACC AGACTCACCT TCAAATATAT CAACAGTTTT

NTCAAGCGCC GTTAAAAAATC AGGCATCGGA CCTCTGGNIN CGAGAGCTGG TTTNATGGGG AAGTTAGATC AACCCGTCAT

CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTITIAATT TIGIATITCA CITGAAAATT GIAAGGNCCA TITIATAATG TATIGCTIGC

AAAATAAGTC ATGGAAGCCC TGAAAAATTA GICAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG

GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGGNC COGITTACAA GNTATTTACA ATGCAAAGGG

GGATACAAGA CATATAAAAG GCTATGGAAC TGCCCTTCCG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGIGGIGGI GCGIGGCTGI AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT

TGCAGTGAGC CGAGAGCACG CCACINCACT CCCGCCTAGC GACAGANTGA GACTCCGTCT CAAAACAAAA CAAAACAAAA

CAAAAAACCA AAAACACTGG GAGTCCCAGT TTGTAGGAAA TCATTAAGAT TTTATTATTT GAGCTCCAGA ACGAGTGAGG

ATGACCTGAT AATTTIGGTT TGGCTCAGGT TGTAATGTGT TTCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT

GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGTN ACATGTCTAC AACACCCGC CCCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCCAGC CTCCTTGGAG CTATCCCTTT CTATCCCCCT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA

ATTCCCACAG GAAAAGCAGG CACTTTATAA ATCAGCGAGG GATTCACGGC GAAATGAGAC TGTTCGTGAG TNATGGCGIN

CCGGGTTGCT TGCCGGTGCT GGCCGCCGNC GGGAGAGCCC GGGCAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA

AGATTGINTG GINCCGTTCC TGACCCGGNC TAAGGTCCCT GTCTTGCAGC TGGATAGCGG CANCTANCIN TTCTCCACTA

GTGCAATCTG CCGATATTTT TTTTTTGTTA TCT

SEO ID NO:1617: (Length of Sequence = 227 Nucleotides)

WO 93/16178 PCT/US93/01294

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TITICTICCAT GCAACANICI GNAGACITAA GIGGCITICI NCIGIACINC CATAGAACCC ACCCAGTACA TACCICCAGI GNGGCACTGA TITITATGCIA TACATATGAC TGIGIGITCA TCICCICCAC CAGACIGIGA GICCCATIGG AGIAGGAACI AAATTIMIT CAACACICIG TCITCATCAC CICGIGIAGI AICITGIACA GAGIAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGITIT TAATGCATGA NGTATACITG TNATCCIGGA GGITGGAAAA GAITCAGIAA AGATAAAGIT TGGCAAAAAT
GAITCICTCC CTAGGAITTG GGGATATGIA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCIT CATTITTIGT
CCIAGATTGA GITATCIATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACITTG GACTTGGCCA
TGCAACTTGC TITGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC
TTCAACTCTC CACCATGAGG ACAACATTGC CCTCCTTCCT GG

SEO ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCICAT CCCAGGITCA AGINATICIC CIGCCICANC CICCIGAGIA GCIGGGATTA CIGGCGCACC ACCACACCCG
GCTAATITIG TATITITAGI AGAGACAGGG TITCGCCAIG TIGGCCAGGC TGGICTIGAA CICCIGACCI CAGGIGATCC
ACCCACCICA GCCITCCAAA GIGCIGGGAT TCCAGGCAIG AGCIACIGIN TCGGCCCAAA TCTITCITAA GITGIGICIG
GCCITTGGCA GAAATAGCCA CAAAGNCAGG GIAGGAACGI TITACTCITC AAGIGATGAT GGCATCCGAT AANCITTTAG
AGGGAGGITT TIAAAATGCA ACGI

SEO ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCCGAA GCTCCTCAGG CTCCCACCCT CTACAAGCTC CTTCTGCTCC AGCCACACTC ACCAGGCCCG AGTTCCCACCC
TAGCACCTTC CCTGGGAAIN ATCTCCCCCT GGTTGGCTCT TTCTACTTAT TCAGCCTCAA ATGINATCTC CACTGANAGG
CCTTTCCTGA CCTGCTGAGC TTGATTCCCT CCCCTCCCCA GTNACATTAC TCCGTGTTAT GGTACCCATC CCTGTCTCCT
TAGCTTGTTT TTGTCTGTAT TGGCTCTTCC ACTAGACTGT AAGCTGCATG AGGCCAGGG ATGTCTGTTT AATNCCAGTT
GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAAATG GGGACGGAT

SEO ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTOGGGG CICGGGGGGG CAGAGAATCI CITGGGAGIC TIGGGIGGGG CIGGIGCATI CIGITICCIC TIGATCICAA
AGGACAATGI GGATTINGGG ACCAAAGGIC AGGGACACAT CCCCITAGAG GACCIGAGIT INGGAGAGIG GIGAGIGGAA
GGGAGGAGCA GCAAGAAGCA GCCIGITITC ACTCAGCITA ATTCICCITC CCAGATAAGG CAAGCCAGIC ATGGAATCIT
GCTGCAGGAC CICCCTCTAC TACITCCTGT CCTAAAAATA GGG

SEO ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTITAA AGCAGATAAT ATTICAAATA TITTCITTGA AATAGACCAT TIGICCIGCC TIGAAGTATG TIAGTACATT
TTAAGAAAGI CAGTGGGITA AGGAGTCAGI GCIGITAGIA TICATGCITA AAACACTICC CITCIACCIA CCCTAATAAA
TGAGGGGCCC AAGAGAAATA TITCIAATTC TCTAGCGACA TGGCIAATTT TITTITTITAA TGIATTITTG TATTITTAGT
ACAGATGGAG TITCACCATG TIGGTCAGGC TGGTCTCAAA CICCIGAGCT CAAGTGATCT GCCTACCTCA GGCTCCTGAG
TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEO ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG GTTCACGCCA TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGGNT AATTTTTTGT ATTTTTAGTA GAGACGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCCGCN CICCCAAAGN GITGGGATTA CAGGNGTGAG CANCCGTGCC CAGCCGTNAA GITAAGATAT TITAAAAANA TCTCTGCAAG TTGAGGAAGT MITTCAGGAC TCTTTCCTGC TTAGTCTCAC T

SEO ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTITIGIGAGO TITITGACCT GOGGGATCOG AGCCAGATTG ACAACAATGA GCCCIACATG AAGATCCCTT GCAATGACTC
TAAAATCACC AGGCTGITT GGGGACCCCT GGGGGAGIGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG
ACCATGITIN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTTGACTC CACAACTCTT GAACATCAGA AGACTTTCCG
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEO ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGGGAC GTTCTACCTC TATAATTCAC GTTCCATGAA
TCAGTACTTC ATTTCTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATAACACAT CTTGTTTTTC CATTCGTCTA
GGTTAAAAAA TTTTTATTT TATTTTTATT TTTTTGTAGA GAGGGATCT CACTGTGTTG CCCAGGCTGG TCTTGACCTC
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA
GAAGAGGCAA GCT

SEO ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TITTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG
TTGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAAG NATATTTTGA
CTATGTTCGG TAAGNTCAA AAATATATAG TGATTTGTTT TACTAAATAT AGTTTCAAAT TCTAGGCCCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTINTCCCTC TGACCTGGGC
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCTC CTCCCACAGC CTCCCTGGGA GGCATGCCAT GCCAAGCACT
CTTTCTGTCT CTGTTCATGA ATAAAAGAGA TGGATGGGCT TATTCTTATA GAGAAGTGAA TTTCACTTAC TCCCCTGGCC
CGAAAACTAG ACCAAATGAG GAACTGTTTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAAC AACACAACAA
AGTGGAGTCA ATCCACTAAT TTTTTTTAAAT CTAACACAAT TGTTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCICCACT CITTATATCA TITTCICCAT CITTCATITC CCATCIGIAC CICCAAAATT TIGCIATGAA
TCTAATTCAT CITTGCICTC TCICCICAT GGGIGCCITT GCTTCIGCCA GICITTCITC TCCIGCCCCA CCCAAACITC
ATGAATTAGT CITTCICCC AGGAGCICTG ATTTCTAGAC TGCITTGAAA ATGCTGIATT CATTTTGCTA ACTTAGIATT
TGGGIACCCT GCTCTTTGGC TGITCTTTTT CIGGAGCCCT TCICAGICAA GICTGCCGGA TGICITTCIT TACCTACCCC
TCAGITTTCC TIAAAACGIG NACACAACIC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT
TGITGTGCTA AGAATENGTA GGTTAAAATA GGGG

SEO ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGAGGT GGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTGACAGC AGCCTCTCCT CTCCCACGGT GGTGCTTGTT TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CCTGACTGTN TCCTTCCGGA GCTGCCGAGG ACTGCAGAGA GGGCCTGGCT TGTCCCCTCT AGGAGCAGCT GGGNNGGTGT CTTGCCTGCA TCCCCCTTCA ATGGTTGAAA

ATAATGATIC CACTIGICAT GAACACCATG AAGGIATCIT GGCAGCCAGA GTCACTCCIG TTCCCGAAGT GGGAAACCIN GGGAGGGICC TCAAAACCCC T

SEO ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TOCTACGATG TECTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG CCATCCAGTG CGTGCGCTC AAGGTCAGTG CAAGGCTGCA GGGTGCATCC TGGGACACCC AGAACGGCCC GCAGGAGCGC CTGGCTGGGG AGACCGCCTG AAGGAGTTCG ACAAGGAGAA AGCCTGGAGA GCCGTCGTGG TGCAAATGGC CCAGTGACCC CCAGACGCGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT TAGCTACTGC TTCTAACAAC TCTTTTCCCT TGTGTTAAGG GAAACCAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATITA TITGGACAGG GCTGTGCTGA GAGTCCCACC CTCACCCCAC AATGGGCGG GGCACTGGCA TCGAACACCA
AGCTGAGTGA GAAGGCCTC TCCAGGCCTC GCAGGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAAGG
GATTCTTCCG GNAAAAGGAG CNCCGCATCG GGCGNCTTAA NCCGGCGTTT CGGTTCATCC CGA

SEO ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTTGCTAAGC CAGTCTCACT CTAGGACACC TGCCTAGGGA CCAGCAAACC TGGAATGAAA GGGCAAGTTC CTCAGTGCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCCAGA CCCAAGAAAA CCACGTCTCT TTTCTTCCTT CATCGACTCA TCCCCTTCTT ACCCTATATT GTCTCCTCCA CTTCCTGCCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCCTGG GACATACCTA TTTCCGCAAC TGAACCTTCC CAACCCCTAG GAAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC AAAGAGGCAT GNACCATAAT TACT

SEO ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTITITCIAC AGCATCITIT TATIGICTIT ACCATTACIT TAATGCATIT TAAAATTIAT CTACATTAAT TGGGAACTAT
TIGCATTITI TICATCCICI CICICTITIN CITTINCITI TITIGGATIT GICTIGGCCA GAGAGGITCI CCAACACCCG
GGIGGACTIG GAATTITITA TCAGCIGCAA TCIGAAGACT TGICITITACI GIGGAATAGG TGACATTCCI TTAGGACCIC
AGAAGCICAA GIAGITTAAT GCCAAGICTI TCCAGAGCCI CACTCICTIT TATITITIAA ATTAGAATIG TGATTTATIG
AACNCITACC ATGGGGITCA TATAATTINI NAAINGANCA GCITTATIGA GGIATAATIC AATACCCCIT TAAAGNATGI
AACCCGIGGG TTTAGAC

SEO ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TITATCCCAA TTCAATGACA
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTTCTGTC GCCCAGGCTG GAGTGCAGTG GGGCATTCAT GGCTCATCGC
AGCCTCCAAC TCTCAGTCTC AAGCAACCCT CCTACGTCAG TGTCCTGAGT AGCTGGAGT ACAGGCATGC ACCACCACAC
TTGGCTCATT TTTAAAAAAAT TTCTTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGTGCCGTG GTGCATTCAC
AGCTCACCGC AGCTCAAACT CTTTGGTCTC AAGCGATCCT CCTGNCTCAG CCTTCTGGGT GGCTGGGCCT CAGGCATACA
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

CAAAACTCAC TITGACCCCA TITAAGAGGCA AGCCTGGCAC ATCIATCCCT GGGCCTTIAG AAAGCCATIT GCCTCAAATG
GCTATAGGGT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGINGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGACGATCG
CTTGAGACCA AGAGTTTGAG CCTGCGGTNA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT
TMTCTACAAG AAATTTTTTA AAAATTGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEO ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCCTTCCG TGTGCCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA
CAACTTCCAG GGAACTGCAG AGTAAGTGCT TAATATTATC CACGAGAAAG CAAAACTAAA TATTAGTGTG CACATTTCTG
AATGAGAAAC TAATTGCTTC ATTGATTTCA ACAATGTAGT GGNAGNAAAC TATTTCAGAT CTCTACAATG CCTAAATGCA
TTCTATTTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEO ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGGCCCGAC GAGGCTCAGA CCTCTTNTAC GNCGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT
CGGGGACGAT GAGGATNACT CTGGCACGGA GGAGTCCTNA CACCACCAGA ATAAACTTGC CGAGTTTANC TCACTAGGGC
CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEO ID NO:1638: (Length of Sequence = 253 Nucleotides)

CACTCAGGCT CACCGTCCTG CICTCGCAC CAGCCTTTCC AGAGCATNCC AGINCTCATG GCTTCATCTG TTAACTGTTG
ATCACTTCAG TCCTGATTTT TAGACCTAAA TGGTTTCCTT AACGCCATTC TAACTGCCTG TGACTCATTT TCACTTACAG
TGTTTATTGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CITCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCATT
CAACATGRCT CGT

SEO ID NO:1639: (Length of Sequence = 360 Nucleotides)

TERCACAAA TEAGCOCCTA CATGAAGATC CCTTGCAATG

AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACCGGAG

CTGTGTGGGG TGTGGACGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTNG TCTCTGGGAC

TGTGAAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAATT CGGCTGTCCG GACCTGCGGT TTTNACTTTG GGGGCAACAT

CATCATGTTC TCCACGGACA AGCAGATGGG CTACCAGTGC TTTTTTTTGAC CTGCGGGATC CGAGCCAGAT

TGACAACAAA TGAGCCCCTA CATGAAGATC CCTTGCAATG

SEO ID NO:1640: (Length of Sequence = 321 Nucleotides)

GEGGGACGCC CTCTGCCTTG TCCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCCC TGGATGGGCC TGAGCATAGC
AGACCACGTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCCT
NCCTGCACAC ACAGTGCTCC CCTCCGATGC TGCCAGCCTG TGGTGGACTT CCTCTTCTGA CCCCTTTCTT GCCNCCGGNC
TGTTTTATCA GTGAAAGGAC TTAACTAAGC AGATCTCCAG GTTCACCTTN TGGAACTCAG CTCAAGGTNA GCACAGCAGG
T

SEO ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCGTGAT AGTTTTTCCC ATCTTAGTAG CCCNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC CACTCAAATG TGGGCCCATTC ACAGGCAGCC AGGGATCCTC TTGGNCCGTG AGGTTGGGGG CTTNCATCAG AATGCAAATC

TRCCGAGGCG TGAAGCACAA TITAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGGAAG GAAGCAGTGT GTTTGAGTTA TACCTTAGGC CAAGCT

SEO ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG
GGTTCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCCTGGCCCA GGAGAGCTCG GCTCGGGGAC
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEO ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATIGGIA GITTAAACIT TICATCIAAT AITAGATIGC AIGCAGGATI TIATATCIAA TIACTCIGGC AGATGGCCIT
TAGAAAGITC AAAAATAAAA TGCAGCAATI CATATIGGCA GATTTACTAT TGAGACCAAT GCTITCITAA CIAAAAGGIT
TIGITTAAAA TCGITAGITT AGGAAATCIG ATAAAGATIT TIGAATATCA GAGCGITTAA AAGAGATICT TACITTACAT
CTGGCATATI TCTIGIGITA CATATIATAA TICCATIGGA ACATGGCIGI CTGTAAAACI ATGIATATGA TCCGGAAGAG
ACTCAAATTA AATTAAGGIT TAACAGCCAT CAAGITCAT

SEO ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NEGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAAGCAA GAAAGTGCTG TATGAACGAA ACGGAAATAT CAATGAAGAG AAATAAAAAAT TATAAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAAAGC ATATCTGAGC ACGTAAAAAAA AGTACTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEO ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTGAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC
CTTCTTTTCT CTATATCAGA AAACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC
AATTGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA
TCGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGINCTC CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC ATTTGTTCAG AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEO ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTOCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
AGGGTT

SEO ID NO:1648: (Length of Sequence = 338 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA CTGAGGAGTA GCTGAGGAG AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA AGGGTGGGGT TTTATGTNTG GGAAAGGGAC CCGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT CAATGGAAAC AGGGCAGT

SEO ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTIVAG GATIGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAACTGGA AGAAGTTCGG GAACTCAGAG TITIGACCCCC CCGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA CCTGAACTGC CAGGAGGAGG AGGACCCTAT GAACAAACTC AAGGGCCAGA AGATCGTGTC CTGCCGCATC TNCAAGGGCCG ACCACTTGGA CCACCCGNTG CCCCTACAAG GATAC

SEO ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCITITAG GAGAAATATA AATNGACAAT
SCTTTAAAAA AGGAGCIGCC ATCATATTAT ACCCTGACCC AGCIGGATAC GAACAAATIC AGCCTTGGCA ATGCAAGICT
TACATCIATT TTATATAGAT TGIATAAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGTCTG
GTAATTAATG AAAGAGAGCC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTIGCTTIT TAATIGIATI TCITAACACT AGAATITICI ATTICAAGIT TITGIACGIG GCCITGCGIC TCCTIAGIAC ATTITATAGI CGCIGIAAGI TGAITCCATT TITCTIGAAA TIGAATICIC ATCTGACCIA ATTICTICCI TGAATCCIAC ATCTCACTIT CTCAATGGAC GCAGIGACGC AATGAAGCAT CCAGCAAAGC TTTTGTTGIT GATTGTTTAG GACGICACCC TGTTTTTGIT GAAGTIGICT CACAACTACT TCTCTTTCIG CTTTCTCTCT TTCATATTGA CATTGTTTTT CTTTTCAAAT GGATTAACTT TATTGATCAT CCTCTTGINC TTCTAGCAAA AGACGGGGC TT

SEO ID NO:1652: (Length of Sequence = 314 Nucleotides)

TITCIGAGIA TGCIGCACIG GATTATIAGC ATGITAAATA GICAAAGGGA CIGGAATAAA CATCAGGAAG ATTICATAAA GIGGIGIAAG TAGAAAAAAA AGGITAAACA ATGAGCIGCA TGITGATAAG TATAAGACAC TGATCCAAGI GGIGGCITCT GAACCATGAT ATTACITAAN CIAGAGIGIT AAGGICAGCT TAAGICAAAA TAAAACAAAG CITCCAAACC CTCATTITAA ACCAGGIAGA TAATAGATGA MICTIGIATC TIGGGAGATA GIACAAGCCA AANGITACAG CIGIGITAAA ACCT

SEO ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTIGCAACT ATGAGGAACT ATAGGACTIT GGTCTTAACA TTCCTGAGCT CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCCTGCCT TINACTGTAA CTCTCAATTG AGCATAATTC CTAAATCAVIT TAATCAATTC TACTCTACTC TGGCATGATT TINAAGGCAT TAACCATAAT TTCCTTCCAA TCTAAAAAAGG GAACTANTAC TTACTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA GGC

SEO ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCITECCT GCAGGAACAT GCCAAGGCG AGTGAAGCAG TGTCACCCAT TITAGAAGAA TGCCATAAAG CCAAGGIAGA AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGCAG CATTTTGCTG AAGCATCAA GGCCAAGAAT GTGCCTCTTC ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG WO 93/16178 PCT/US93/01294

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ANTCATCIGG GECACITCIA CCITGICCAG CICCCICCAG GGATGITTIG GIGCCGCICA GCICCIGCCC GIGICATIGI GGGICTCCIC AGAGICCCCA TCGATITACA GG

SEO ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGIAAATT GIGAGACIGI TIGIATATAT INTITGITTA TAIGITTITG TIGITGITAT GIIGITATNI TIATITATAA
AATGATAGAT CIGIGGGIAG GIICIGAGAA AIGAATAGCI TGIATITCCI TITITATGAA AGAAGAACAA AATGAAGIIC
AAGIGGAAAG TAICICCAGA AAGIITAACA TITICITATI AACCAACICA TIGATIGGCA TGIGAAACIT GAGATATITI
ATATAGCACI TITITAAATGA GGATCTAGCI TCACINIATC ATACAACCAC ATITAAAATA GCCAGGICCA TGGICATIAT
AGGGG

SEO ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGENITAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGGAAGAACA CCTGTAAGGN AAGAAGGGAG CCTGGGAAGA
GCAGNGGNAG AAGGTGAACT CTGATTCACT TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCCTGTT TACTC

SEO ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTIGACTI TECTITITIC CCCCCAAGTA GAACTAATEC TAGCTTCCAG CTIGAAAGTA AAACTCCAGT GIGGAGTGAA
TITTIGIGICT AATTATAAAC CIGTAACCAA AACTCAGACA TCIGGTACTG GICTITIGCAT TGAGATIGGT CCCTGTAAAA
CCCCCTITAA AAGCATATIG CATTTAGTAC AGAGCTCTIT TTIGAAATGN AGGCTGGAGA TGIGCATTIT TCACGGTGIT
AACTGGTTGT ATCTTATTAG CAAGGAGATT GGGGGTTTTG AGTGTTTGCG TGGGTGGGTT TCAAATTTGC CAGGGAACC
AGTGGGCAGG CTGCTAGCAA GGCAGTGAGG AAGCTCTTGG CAGCCAAATG GGGTGCATTT CAGGG

SEO ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTTCCT CCCAACACTG CCCCAAGAGC CCGTTGTTAA ACGTTTACCA GCACACTACT GGGCTGTTTC
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTTAGTCT
CTATTTTTCT TCAACTCTCC AGGATGTTTG AGAGCTGATC TTTCCCTCCC TCTTGAGCCT CCTCTCCTGC CTGGCTTTTA
GGGGTCTTG CTGACTTTTC TTCATTTCTA AACACATGTN CTCAGGGGGT CCTCAGCCCT GCAAGGCCNA TGCACTGGGT
ACCCAGTCCT GTGGGCCT

SEO ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGIATGIGAA GICAATCACT TITTATATGC AGATAATATG CGACTTATAA TGGAAGGICA CGITTCAATA GCAAACAAAA
AAGCTATAAG TAACAAAGAA TAACAAAACT ATAAATGIAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT
AAAATAAAAC GNGTAAATGG AAAGACAAGA TGTGTTGTGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC
TATTATGGAG CTCTCAAAGT ATACTG

SEO ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTIGAATGC ACTGCCATAT TGTCAAGCTG CATTCCTTAA GCATCACTTC TTAGAGGCCT CAAGCTTCTC GGGAATGTTT GATGACTTAA AGGGGAAATG AACAGGTTGC AATNATGCTT GTCAAGNTTC TTCTTGTGAA CCTCTATTTG GACAATTCAC ACAAAAAAAG AAAGCAGCTC ATTTTCTAAT TCAGGATATT ATTTCTTTTT AAAACTGGTA

SEO ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT
TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTCATC CTGGGCCCTG GCCGATATGC ATATCAACAT TTATACATGG
AACTGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT
TCAGTGACCT TGAGGGCTAA AGATTVITCT TCTGGTGTAA GAGCTCTTTG GGCT

SEO ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTITCATE AGGCAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACTTCC CACTGGCTT
GGAATAGCTA AGTGCATTGA TITIKGTGTA GITGTGAGTT TITITCTYTC ATTGATATIT TACGTATTKC TGGGGTAAAT
GTATTITTWA CATGCATTGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTTGAGTGT TTATCATTTC
TATGTGTGGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GECAGTIGGA CTCTCTGTGG ATAGACTGAT TCTTGTTTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC
GECTCGGAGG AATGTCTCTG TGATCCCCAT TCTTGATGGA GGGAGTGAAA AGGGGCCTGG NCTTCGCCCG CTGCTCTCCT
GACAGAAACA GTAAGTNACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCATGGTCT CCAGCCNNNC
ACCCGTCTCC AGCCACCCCT GGAGCGGCCCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCCACACGT
CTTTCTTTNG ACACCCAGAA AACTT

SEO ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAAATA ATTCCTATAA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT
GGTTTAGGAA GCATAAAATT ATGTAACTTA TIGTTTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGTTAGAGAT
GAACAGATTG ATACAAACTG TTCTATGGTT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA
TGTCTTTTAT GCTNTTCCTT TTTACATATG TATCTNTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA
CTATTAATAA TTAA

SEO ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCTA TGAAGCATCC CITCCACATC AGATCAAAGA CATCITAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA
ACACGCCAGA GGCTTTTGGA ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA
CTGTRATGTG TGGTCCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCCTTTGTCT GCATTGACGG CCCTGTGACG
GCCTCCAGGC CACAGGCCTG CTTTCTCCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTGCTTCC

SEO ID NO:1666: (Length of Sequence = 352 Nucleotides)

TITITITITA CATACAAAGI TIGGATITIT ATIGAAATCI TGITAGGIAT CAAACAAATT CIGCITTCIT CAGATAAAAA
TATICICICA GATGICICCA GATAACIGCI AAGICIAAAT TGGICCITCA AIGICITATT TITATIGICC TCGIGAAATG
TTCATATACA GITAAGATGI TCCCAAAAGG ATITITATCG TGIAAAGGAG CGIACATGAC GACCICIACC ACIGCCTCCA
CTAACAAACT TICCICTIGA GCCICCACIG CCGCIATTIG CACTAGCCCA GGGAAGGICC AAGICCCCCA CGACCICIAG
AAGCACGGIT CCGAGGGACT TIGGCGGIAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAAINATG COGCTGCCCA CATTTTGGTC CATTCTTTT TTTATTATGC TTCTCTTNCT TGGACTGGAT AGCCAGGGAT GTTTCANCTT CTCGCTCGTC AAGTACGTAC CCCTGACCTA CAACAAAACA TACGTNTACC CCAACTGGGC CATTGGGCTG

GECTGGAGCC TGGCCCTTTN CTCCATGCTC TTMGNTCCCT TGGTCATCGT CATCCGGCCT CTGCCAGACT GAGGGGGCCG
TTCCTTTGTG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTITA TITCACAAAC ACTAGGAAGA TGGGTIGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC
ACAGAGTCAG CAGCAGCAGC CTENICCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA
GAGGGGAGIN CAGNAGGGCC CCINAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA
GCAATAAATA AAAGINNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEO ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTITIAATGAC AGATITICCI AAAAGAAACC ACTATAACAT CIGICCAAGT ACTCCAGAGA AAACAAAAAA TACATAAAGA
TTAAAAGGICI ATTACITTAA CAGCACATIG CCAAACACGG ACAACTAGGA TAAATGCCAA GAAACCITAA AAAATAACIT
TAAAAGATGC AACGITCAAG CCATTCAAAC GCGTAGGITC CACAAACAAC AGGNNAACAA GTCCAAGAGC AGTICTACIT
GTGCATGATG GTAACTCAGA CIGIACTTCA TCAAAGITCA TTCAGGIGIT TCATAGGCGI CTGAGCAGAG TTTTGITTTT
TTCITTCCTT GCTT

SEO ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTITCAAGAG AAAAACITGA GGTCTIAATA ATINITGGGC AACITGACAG CAGAACAGGG
TAAAANTGAG TTAGCTACAA AGGCTCATCA GAAAATGGCA ATAGATTCCA GAGAGATTTA ATAACTACTT ACAAACTCTG
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAAT

SEO ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GIITCAAGAG AAAAACITGA GGTCTTAATA ATTITKGGGC AACITGACAG CAGAACAGGG TAAAAWTRAG TTAGCTACAA AGGCTCATCA GAAAATSGCA ATAGATTCCA GAGAGATTTA ATAACTACIT ACAAACTCTG CTATAGGGTG GACAAATCTG GCCCATG

SEO ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAC ATCETTATT ATETGAATIT TITACAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA ATGCAGAATG GIGACTITIT TCTCTTCAAG AGGCCATGAT TCCCATTTCT AGTAAAATAA AGAGACTGCA TATAGGTAGA AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCCCC CCCTGCTACT TACCCTAAAG TGTAAAAAAGG GAGTTAAAGG AAAGTTTCCT TGTTGGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA ATATATGGG

SEO ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGINGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT
CTCTGATGAG GTGGTTTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCATTCTCC TGGCAGATGA
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGCTGGC TGCACAGTGG CATCACATGG
GGAAGTAGAA AAACCTCTGA TGCCTGTCCC CACCCGGCTT AATCACAGTG AAGTCAGATT ATCTGGGNCT GGGACCCTAC
CATCATTTTT TTTAAAGAAT TGCAGGGGCC AGGGCGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

<u>SEO ID NO:1674:</u> (Length of Sequence = 377 Nucleotides)

SEO ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGICAA TCAGCIACGC ACCCAGITCI CAAAGACCIC ACATGCIAGG GAAGGIGCGG AGGCAGAGIT GIGGITCAGA
AGCAGITACA GGICICAAAG CAAGAACAGC AGCCAAAGCI TCCACGCCCI GACGCIGCCI CTGAATGGIA AACCAATGGC
ATATGGIATC CACAGCIAGG CITTGCTITT TICTGAGIGA AGGIAAAAGG CATTTGAAAA TAAACCAAAG TITCACAGAC
TATGITTATG GAACAAACAT GGGCCATTIT CAGGGATATA AAAGICGATG TICTATGIAG GCCCCCATAT GAGIATTIAT
CTACTITITA TITACTITAT TITATGGAAT TIATITGACA AGGGGCTICA CTCTGITCGG A

SEO ID NO:1675: (Length of Sequence = 404 Nucleotides)

CIGIGITGAT IGCTIGAGCC CATCACAGIT TAGCTCTCAC AGCITTAATT TACTAGCCCA IGAGAAGTCA GCITCAAAGA
ACACCATITC GACTCTCAAA GAACATTATC AATGIACATG GATAGCTTCC AACITCATAA GGIGITTCTC TCTACCTAGA
GCAATTAACA TIAATTIGCA GAATAGTGIT TATTGAAAAC CITTGIGTAT CTCCAACAAA GTAATAGTGI ATTGATTTCA
TTCCTACTAT CITCAACIGI ATCATTAAGA GGAATTTCTI AGGNAAGTCI ATATGCAGTA AGCAAGTAAG ATCGCAGAAC
ATCAAAGGGN GGAAGTAAAT CCCAAAACIG GNITTTACCT TCCTTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTTAA
AGCT

SEO ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAACT ATGAGCCAGG AGTCTACACA GAGAAGGTTC TGGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCACG
TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG
ATGCTTCCCG CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT
GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG
CCCAGAGTTG CCCCGGGCGA TCATGGCTCA AGCTTCCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACIGIGCA AATAATCCAT GAATATATIG TITITATACA GCATTACAGA TAAGGCTIGC AGCICTATAG ATCACCCTCA TCCACICCIT CACTCCATIG CIACACTTAA AAGCCTCACA TGCICTCCIG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC GCCCACAGIA GCCTTCTTTT GITTCCTGTT TATAAACCAT ACATTTTCIA TGGCTACACA TACGTGTATT GITTCATGCT TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTCACA CTTTCCTNAT TACAGTCAAC ATTTGCNGGA ATACAGAATG CACGAGATCA AGGANCTTTT CTCAAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGGNGGCT CATTGGTTTT CACTCTCACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCCTCA AATCCACCCT GCAGCTCCCT GGCTGCAAAT ACACTCACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT CCTCAGTTGT ACAAAGCATT TTCATTTGAA TACAAAAGGC AACTNENCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA CTGAATTTNA GGCTCA SEO ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAGTAGT TCCTTTCCCG CITTATTTT TAGCIGCTIT TIGGGITTA TACAATGAAC ATGIATTAAT IGIAGAAGAA
AACGATGICA TCCTTTATGA TAAAATCCAT TICCATTITA GCTTTTTTAA AAAAACAAAA AGCIGTIGIG GACAGATGAA
CATCCAAGTA CIGGGCACAC CICCAGCCCT CCCTCTTCCA CIGAAGGCCA TIGCCTATTC CIAGAAAGTI CITTCCCAGG
TATGCAGCIT TCAGTITCCA CITCAGAGGC CACAGTGICT GGGGGAACGG ACIGCCCCCA ATACTAAAGG GAGICAAAAT
CICTTTAATT NCCGCACTIC CICAGTACCA ACAAGGAAGT CCCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC
CTTTTTTGAT TGGCAAGCAT TGGGGNICCT AGGGCCTT

SEO ID NO:1681: (Length of Sequence = 370 Nucleotides)

SEO ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACCAAA CACACCTTCA CCAACCACAT GGTTTTTAAG TTTGACTGCA CAAACACACT CAATGACCAG ACCTTGGAGA ATGTNACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTTAC GTGCCTGCCC GGAGCCTGCC CTACAACCAG CCCGCGACCT GCTACACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTCAGCT GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN CTGGGAAGAT CTTGGAAGTT TACTTGTAGC TTGTTCACAT TCCAAAAGGT TCATGGAAAC TGAACTTCGA GCAGCCT

SEO ID NO:1683: (Length of Sequence = 396 Nucleotides)

GECTIGOGRA AGGAGCOGCT CTCGCCGCCG CCACCTCGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTCGGAACAA
TGGGACTCGG CGCGCGAGGT GCTTGGGCCCG CGCTGCTCCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCCGCCCAT
GAAAGCCGCAN CATGGCGGCA TCTGCAAACA TAGAGAATTC TGGGCTTCCA CACAACTCCA GTGCTAACTC AACAGAGACT
CTCCAACATG TGCCTTCTGA CCATACAAAT GAAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT
CCAAGTNATA CAAACGGTCA CCACCATGGN AAACCTTACA AGCGGCCATT TTAATTNCAA ACANCAACCA GGGGAT

<u>SEO ID NO:1684:</u> (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGGT CAGACCCCTG CACGGGACAT CTTGCCTTTN AGTGTGCAGA
GTACATGGGG AAGGGGCTGG GGCACCACT GTGTACCTGG GCCCAGTAAG GCATTTGCCG TGATTCCCAC AACGGGGTCA
AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCCC TGCTATAGAC CTTCACAAAC GACTTCCACT GCTGAAGCCT
GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG
TTGGCTTTTG GCCTAAAGCT TNNCCCAGAG TTAGGGTGTA GGATGTCTGT GGTCTGTGAG ATGCCTTTCC CTTCCCCCCT
CTGCTTCAAC CGTGGTT

SEO ID NO:1685: (Length of Sequence = 429 Nucleotides)

 WO 93/16178 PCT/US93/01294

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TGAGAGAATA AATGGGIAAT GGGAGGAGAA CIATITIAAC AAGGGTCCIG GGITTCTCTT TGCAAACACA GTAGGCITAA ACITTGCCIG CITITIAAAA TGGCATTTT

SEO ID NO:1686: (Length of Sequence = 445 Nucleotides)

TETCTTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT
TECCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTTGAG AAAGAGTCTC
ATTCTGTCGC CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC
CGCCTCAGCC TCCCGACTAG CTGCGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTTA AGTAGAGATG
GGGGCCTCAC CATATTGGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG
TGCTTGGGGA TTANAGGGAA TNGGGCCACC GGGGCTTGGG CCAAT

SEO ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAAA TAAAGCAATA ACITTAAAGA CCICAGACAC ACACAGIATA AACACCIGGG TAAGGITTIN TCCGIGICCA TGITGACACC GGAACIACCG TTAAAGIGCA AGITTIGITT TGIGITCCTI TGIGCAGITT CACTCACATG TAAACAAGIC ACITGGCIAT

SEO ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT
TACATCTTAT TCGTGTATTT CTCTGAGTAT TTATATCCCG TCTCCTTTTT TCATTCTTAA AAATAAATGA ATTTTCACTG
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCATAT ATTGTAAATG TGTCTGGTAT
TTACAGCAAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CITCIGICGG ATCAGCGIAT TCCIAGATIA GGAATTCAAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT
TTCTGGAGAG GACCTCAGTC CIGGGCITIT CCCIGGCAIT GCIACCIGGG TGGGIGCICA CCACTCAGGI GCIGGIGITG
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAGGC TAATTAACAG GGTTTAGGIG CCTAATTATC ATGACTCAGC
CCGGGACTTA TGGTTAGCCG TGCAGGCCAG GIGAGTCTC TATGGACTTC CTCTCAGACT GCICTTTCTC ATTTTGTCCT
GATGAGATAT TGACAGTCAT GTCCACCCGC TTCCTCATCC ATTTCCCGTC TTTGGGCCCT GGGAAGTACG GGGGCCTCTG

SEO ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGINATATAC CITTAAAAGI AACIAATGCA ACIGCCAAAN AGGGACAGIG TCAATATCAT TGINITCATT AGAAGGACGG CIGCCCCACA CIGINAGAAC ACIGCTGIIC CIAACAGIAG TITACITINA GAGGGATGIN AGAATTAGIT TNACCITAAT TCCAGATGIG CATGCCTCAA AAGAAAAATC CCATTCTCCT TCCITTTGGG GAGCACTITT GGIGGCACCA AGGCTGGIGT GGGGIAGIGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTIC ACTAGCTGIG TGACTTGGGC AAGCAGCTTIG CAGTCTC

SEO ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCICCC AAAGTGCIGG GATTATAGGC GIGAGCACGT GCGCCCAGCC TTACTTATTT TTAAATCAGA TTTTTTAATC
AACTAAAACA GCTATGAGIT AAGTACCIGC CCIGCAAAAA TTTTTAGAAA AAGITTTAGG ATTATGAAAT TAAGAATTAT
TTTCCTTAAC TGGAACAGIT CTAAAAATTTA TCIGATACTT CTCIAACAAG TGAGTGATCT CATGIAACCC CAGITTGIAT

CITAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TITGTATCGG TTTTATAATT CTCATGTCTT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TITITITICSC AAAAATAGIA TATATITATI AIGIACAACA IGIATITIGA GATAIGIATA CATIGIGGAA IGICIAAATI GAGCIAACAA AIACATIATC ICACATACCA IGIITITITIG IGGIGACAAC AITCAACAAT AIAGACCAIT ICACAAATIT GCAIGITATC ITIGIGCAGG GGCIAIGCCA AICIICICIG IATITITINCA AICIIGGIGI AIGIGCIGCI GAAGCACACA CCCIAATICC ITICATITAA GGNICIAGII AACCIITICIC ITAAGIATAA CCAIGIATIT IGIIAAGCAA IATCIITITIA TIACAAAAAT GCCAITITIT ICIGGNIAGG AAAATIGATI

SEO ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TTGTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTTGTGGCT GAAAAAAATTC AGAGAATATA
AATTACTTCT TGTGAAGAGA CTGAAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATCGC
CATTTTNCTT TGATGTTCTC CAGAGTTTTA CATTACACTT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTCGGTGTT
TGTTACAGCC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCCTGAAA

<u>SEO ID NO:1694:</u> (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC
NCCGGGCCTG CCCCGGACCC TGGTTTCCCT GAGGACCAAC GTGAATGGGG GCCCCACTGG AAAGATGCTT GGGGCTGCAG
AGCGGATGGA ATGCAGGCCC AGGTTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGCC CGCTGGGCTC
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA
GCACAGGTCT CCTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEO ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GEGITIGAAC TEGACATCCT AATGATECAA TTACGICATC ACCCAGCTGA TTCCGGGTGG TTGGCAAACT CATCGTGTCT GTCCTGAGAG GCTCCACAAT GCCCACCCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG GGGCAGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATTCTCT TCTCTTTTAC CATTTINCTG CGTGCTCTCA CTCTCTCTTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT TCCTCCAGCC CTTGTCTCGG AGACGGTGTT TTCCTCCCTT GCCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT GGTGGGTCGT T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CITIGIGATG TITITACGCI TIACAAAAAG CAGATITGGI AITCAGAAAA GCCIGCAAAT ACAACATIGC TIAAGAGAAC CIGIAAACAC GITIGGAATA CAATGCAACA CAAGICAGCA AGGACAGGG TAGGICCAAA GGAGCCAGCI AGGGGGAAAG GIGACAGAAA AGGAGAGGA AGGATGGNGA CAGACATCAC CIGIGGICTC TAAGGGGGCC NIGIGITTAA TITATAAGGI TINCINCCCA CAGGAGITCI NNIGIGATCI ATCCGITCAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTICITCAT TTACAAGAGG AATATATITG GCITCICTCT TAAGACICTG AGATTCACAA TCAGCAGCTC TAAAAAAATAA AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTCGT TCTTGTACAA CAAGAAAACA TCGCTGGGGC CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTTGTCA GGCCCTCGGG

GIACCCCAGA GCTINGIGGG TGAGIATICC ACCIGCITAC ACACCACIGA AGCCACAGCC AGCCAGIAAC TAAGGGGCAA GAAAGAGCAT TGICCAAGCI GGCICTTING GGGGGICCCC CATINGGCCA CAAAGGCCIC ACCCCCCACC CCATCCCCGI AACCAGAAAC CACCITGA

SEO ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTITIATIG TITATITACI TATTITITAC CCITTITICA AGAGATGGGG TCTCACAGIG TIGCCCAGGC TGGACTIGAA
CTCCCACTCC TGGGCTCCAG CAGTCCTCCT GCCTCACCIT TCCAAGIAGC TGGGGCTATA AGIACACACC ACCATGCCCA
GCAATATITT AATTICIGIA ATGIGICATI TAGCCAGTGA TIGTIGIATI ATAATAGAAT CACAGAAATG GAGGGACTCC
TAGAGGIAAT CAAATCIGGI GGITTITAAG CCITTIATIC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTITT
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

<u>SEO ID NO:1699:</u> (Length of Sequence = 365 Nucleotides)

GGIACAIGIG CACAACGING GNGITIGITA CATATGIATA CATATGCCAT GITAGIGIGC TGCACCCATT AACICGICAT
TTAGCATTAG GIATATCICC TAATGCTATC CCICCTCCCT CCCCCTACGC CACAACAGIC CCIGGIGIGI GATGITCCCC
TTCCTGIGIC CATGIGITCT CATTATTCAA TTCCCACCTA CGAGIGAGAA CATGCTGIGI TTGGITTITT GICCTIGCGA
TAGCCAGATG CAGCTACTCT TAATGIGCAT AITTTCATCC TAGAACATTG GAGAGITCCT GIAAAAGCCT TGIGITCCAG
GAGGAAGGAG ATCCTGACCC TTCTGCTGAT GGCAGCAGTC AGGGG

<u>SEO ID NO:1700:</u> (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAACT CTCCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCCTCTCA GTATCTCCAG TTTAAAACCT
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTTGCTT ATATGATGA AGACCAATTG
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAG-XCTA
TTTGCCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTTCTTTTAG GTTCAATCAG ACAACGT

SEO ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCIAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCCACTT GGCTTCTACC ACGTCCA:AAA CATCGCAGTG GAGGTGACCA AGTCCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC AGCAGCACCC GTCCCGCCC CTCTGCCAAGG ACGTGCTCAG CCCCCTNAGG CCCTCGCGCC GTCACTTCCC TCGGGTCATG CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCIGITGIC AGCACAGITT TATTIGCIGI GGAATCCAIG AGAGCCGGAA GCATCGIIGG GGCCGIGGCI AGCAGAGCIC
ATGGIGACCA GICCIGGGCC TGACCAAIGG GIGATTACAI TIAAAAACCA AAACAAAACA AAACAAAATA CCAAGAACAG
ATCACIIGCC AIGGACAICA GIAATCIAIT GGIAATCGIG AAAATITICAI GAAAATITICC CCIAAACCAI AACAAAAACI
GICCICCITA CCCCAAAAGI GCIGGAGGGA AAGATGGIIG CAIGGCITIG ACCICICITI GAACIIGAAA TGCIACCITC
CIACCCGGAA AAIGCGGCAC ACIATACIIT

SEO ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCCTGC CCTCCAGAAG CTCACATCCT CCTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT GTGGCAGCAG ATGTAGTATG CAGTGCAGAG GTGGCCATGG TTGCNAGGGC AAGGAGGGCT TCCTAGCATG GGCGTTATTT GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATTG TNATCTGAGC CAGGGACAGA TACCTCTNTG AGCCTTGGTT

TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC AAGCAAGTTC ACCTAGAGG

SEO ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTTGGCCATT AACGAGGAGG
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCCAGTCCT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCITAT TRAGICCATI TEGIGAGGIA ATGITITCTI GGATGICCII GATGCCITGIA GACATITGII GATACCIGGG
CATTAAAGNG TRAGGIATII ATICCAGICI TCACAGIATA GGCTIGITII TAGCCATCCI TITIGAGAGG ACTITCCAAG
AATICAAAAG GGATIGAGIG TIGIGACCIA AGCCTATGGI CACIGCAGCC ATITCAGCAC TAGAGAGTIC CCTAAGCCCC
GGAATGCIGC AACTCTTACA GACTCCTIGA TACACAGCTI TGGIAGATII TGGGAAAATA AGGGAGAATI CCCTGGGGIT
ACCAGGIAAA AAGTCTCTCC CACITCCCTC TCTTTCTGGC AAAGGAAGIC AGTCTCTGCA CCAGGCTGCC TGGAGITTGG
GGGAGGGATA AGGCGGTCAC TCTAAT

SEO ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTITATITO CITACATOGA AGAAAATGIT AAAGAGTATO INCAGACACA TIGGGAAGAA GAGGAGTGCO AGCAGGATGI CAGTOTITTG AGGAAACAGG CIGAAGAGGA CGCCCACCTG GATGGGGTG TICCTATCCC TGCAGCATCT GGGAATGGAG TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGCAYCGAAA GACCACTGCA CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGCCATTCA CAGCTGGGCG CATGAAAGCA GAGTTCTTTG CAGATGTAGT TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTTGAGGCA CAGAAACTGT TATTCGGGCA TT

SEO ID NO:1707: (Length of Sequence = 434 Nucleotides)

GIGIGICICE AAAAAAAAA AAGATICTAG GCATGGIGGT GIGITGACIG TAGTICCAGC TACTCCAGAG GCTGAGGIGG
GAGGATIGGT TGAGCCIGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CITGICTCAA
GAAAGGAAAG AAATCACIGG CICTICIGIA AAAAATGATC TGITAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAAT
AATCTITCAT TTAAGAAATA CTACCAAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAAG CAGCINGGCG TGGIGGCICA
CACCIGTAAT CCCTACACCT TGGGGAGGCT GAGGCGGGAG GNICGCCTGA GGICAGGAGT TCGAGACCAG CCTGGCCAAC
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEO ID NO:1708: (Length of Sequence = 440 Nucleotides)

GEACCAGGAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTCGAA GTGTACCCAG TAGAACTGCT
GCTTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATTC TATTGGCCTA GTATTGCGCA
CAGCTCGGGA GCGGTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG
TTCGTATGAC ACACACTCA CGGTTCTCGA TGCGCCCCTT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TITGICITAT GIAGAATICC CIATAGIAAG AAAACCCAGT AGAGAAAGIG GITTINAGAC CATTCGGCAG CIGCITIGGA
CACCIGGAGC CATTICITIT ACAGAIGAAG ATGCATIGIG TCATTGICIC AGGATCCICG TCCIGITGCI TCTCIGGCCA
CAAATIGITC TITACCAAAG ATGATTITAT TICACIGICT TIGAAAATCA TICITITATAG GIAGAATATG AAGATTCICT
GAAATGATIC CAAAATGCCA AACTCAAACA CIATIGICCG ATTICITIAC TIGCAACAAG AGAGIAGAAG GGACAGIATT
TGITTIGIGA TGITGGGGCG TICATCAGGG AGAGAATTIG AGATAAGIAG GAATAGCAAA TAGGAATAGI GAAATAACCT
AGAT

SEO ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTEATCTGC CGACCAGAGG CCTTAAACTC TGGTGTTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACTGTCC
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEO ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGCATGT NATCATTINA ATGATGINAT CITIGGIGIT TOCCICATTA GCIGIAGACI ATCCCCTCTC CICCCACCAC
AATGITTCTA TGATGAGITA CAAACAGAAA GGAAATCACA TITICATACT AAAAACAAAA TGATCAGAGC CITGATTICT
CCACTAGAAA CTACACGIAC AGGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TICTGACCTG
GGAGTCTCCT CCCCTTCCCC AGCCTTGGCC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CACCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TITTGGTGGT TICCTCTTTA TIGTGTGCCT CCTACCTTCC CCCACAATTI CAGTCCCTTC CAACACCCCA AAAAGAAGGA GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAACTA AGCACAGTAT CCTACAACAG CAAATGTCTT TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCCC AGTGGCACTC TGT

SEO ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTCACAC
TTAAGGATAT ACTCAAGAGA AATGAAAACT AAAAACATAC GGCTACCCAA AAACTTACAT AAGANTGTTC ACAGCAACAT
TATTCATAAT AACCAAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCACAGRA
TGGRATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTSNT ATGTACTACA ACATCGGTG

SEO ID NO:1715: (Length of Sequence = 371 Nucleotides)

TITITITIAC COGGGCGITC CIGAGITTAT TIGGGGCACA CCCGGACGAG GGCCCTGCAC CIAGAAGAAG GIGITGGGCC TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGGC AGCCGGAACT TGATCTTGGA GTCGTGGAAC TGCTTGACAG CCCGCCGGCG GCACTTGCTG GCCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

GIGCOGGGCA CCCATGICIC GGIAGCACIG GGIGACAGCG CCIGCGGIGG TCAAGICCCG GIATICCCGG TACATGITGI GGGIGCOGCT CCGGGAGICA TAGCGCAGCA AGATCCCGAA GIICITCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCCTC GCCCGGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA AGCACGTCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT TNCAGCGCGT CTTCGGTTGT TTCCC

SEO ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTTGTCG TTCCCACCCA CCCCCTCCT CGGCCCGAGC CTTTTCCCGG
TGGGTGTCAG GMTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCCAA GAGGCTCTGC
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGCGGGG CCTGCTGGGA CTTGTAGTTG CCTAGACAGG GCACCACCCT
GCACTTCCGG ACCCGCGCTG GAGGCGCCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEO ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTTAGA ACTTTCCATT CTCAAACTGA
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACTATG TGGCAACTGT GGTCGCAATG TCCTTGTGAA AGATCTGAAG
ACTCACCCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT
CTTMGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCCT CAGACAAATT GAGGGCTCT

SEO ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATITIG TITAATITAT TITAAGACCAC CICCITACAA CITCCAGAGA GAAAATACAA AACAAGAAAC AGACITGGIT TCAAATGCAT AACCAGGIGC TGGAGITTAA AGCATTACIG ATAACATIGT TACAGAAGAA TGGCAGCITA CICCAGGGCA CTTCAGTATI CCTGAGGAAT AAACATGATT TCGGAAG

SEO ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGGGG CAGAGGGAGC ATGACGGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCCA GGGTGGGAGG AAGGATCANC
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAA AGGGTGAAG AGG

SEO ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTTAATGG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC
CCCCGCCGCG NTAGAGAACC ACAAGCCCGG CCGTGCAGCC CTCCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG
TATGTTACAG TATGTACAAG ACCCCTCCCC TCGGGGGACG GGCCGACTN CGCAACCAGT TCCTATGTAC ACCACCTCCC
CTTTCGGCCC TGAGGTCAGT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT .
GCCGAG

SEO ID NO:1722: (Length of Sequence = 291 Nucleotides)

TGITTITAAA AATGAGAAAA TITGGAGAGA GAATACIATI ATGICAACGG TACAAGACIC TGAATCITGA AGATGIAGAT
GGATATAATA TITAGACITI ATATACACCC ATAGATATGI ATTITATATAT GCATACGITT TGIATAAATI TACAATIGAC
TTITTGIATI CICTITNCIG TCATIACAAG AATGAGATGG AAACCAAAAT AGITGINCCA TCCTCTTACC CAAAGAGGGA
TACTGAAAAG TCCGGTATGI GCATGCACTI GITTCTCTGG GGTCAAATCI G

SEO ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCCC TCCCTCGATT CCTTCCTGTT GICTCCAGAA GCTGCTGTG GCTTGCTAAA AGGGACAGCA CTTGTCCTAG
CCCGATTACC TTTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCCACAG TGTTCTTAGA TCGCCTTGCA GTGATATTTA GGCATACCAA
TCCCATTGTG GAAAATGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT
AAAATAAGCA CCGAGCTGNA TAATCCGATT GTAGAGCGTT GTTTGCAGG

SEO ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGIATIGIT AGITCGATTC CITCAAATIT TATACATATI TACITICIGI TAAAGAGAAA AGGATAAAAT GGIATAAAAA
AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATITIC CCIGIGIGAG GCIAAGACAG AWGCAAATCT
CGITANGAAA AATGCCACCC ACACAACAGG AANITTATCC AAAACAAAAC AAAAGCAGIT ATAGANCCCC T

SEO ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT ACACAGGGAA AGTACAT A TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT GCCTACCCAA ACACGCT A GGGCAGACCC ATGACCATGA GAGGGCACA CGTAGCTGTG AATGCAGGGC ACCGAGAGC ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTC AGTGGGGCAC ACGCAGG

SEO ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCCGAKT TGCCCCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA TCACTCATGC CCTGGACGTA GCCGAGGTCG AAGTGATACA TT

SEO ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGIATIGAT TICAGGCAGG ACCCAGGICC CAAAATGITA GAAACAGITA TCCITITICC CTCTGAGITC GITATICICI
GGGGCCCCAG TATCCGIGGC TTAACAACCC GGCTGGATAG AAGGCACCIC TTTCCCCAGG TICCAACAAG ATCCCAGAGC
TGCTTCTCAT TGGCTCGICC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG
TGCCCACCCC TGGGGATCCA GCTGTGGGNC TNCTTTAACA GCATT

SEO ID NO:1728: (Length of Sequence = 394 Nucleotides)

TITITITICAT GAGGAGATAT AGCAAAGGGT CATTIGCCCC TCCTTCAGAA AACITITCTC CAAATCTCCT TTAAACATAC
TGCCTTATCT TTCCCTCCAT AACITCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC
GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACITCCATC TCTTTCCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG
GAGAGTATGG GATTTTGTTC TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC
AAAATGATAT CGGGTAAAAC ATGCAACTGA GAGCAATTTG GGGAAAAAATC CTCAGGNCAC AAAATGTATT ACTG

SEO ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGITAAA GTATTTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GGNGTTTKTA GGKGAAGITT
AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAAA ACAGTCACAG
GAAAWTAAAA ATACACCMCA GGTTACCAGA ACCTTCAGGT TTAAAATAAA ANGNAAGNAA AAGCAGAAGC AGTGAGCATC
GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEO ID NO:1730: (Length of Sequence = 312 Nucleotides)

GAGERACECT CTTGCCACGC CCTGAGGGTG TACACATGAT GINITCTATG CATTCACCCT GCCCCCAGC CCGCCCTGCA GAGGACAAGA TGGGTGGCCC CGGGTCCCTT TCCCCTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT TCTGTGTCAC TGGCGTGTCA CGTGATGTAG CCGTGTTTGC TGACATGAGC CCCTGCCCCC TTCTCTGTTT CTCCGTTGGT TTCTAGAGGT CTCTCCCTCC CCTTCTCAGA GGGGACAGGA CTCCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCCGCTATG GGTTCCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG
CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGGC CCAAGAAGCG GGCGCAGACG TTGCTGTTCA
GCCACCACGC GGTTATTTCG GTGCGCGACG GCAAGCTCTG CCTCATGTGG CGCGTGGGCA ACCTGCGCAA GAGCCACATT
GTGGAGGCCC ACGTGCGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGA
CCTCAACGTG GGCTATGACA TCGGCCTTGA CCGCATCTTC CTGGTGTCGC CCATCATCAT TTTNCACGAG AT

SEO ID NO:1732: (Length of Sequence = 352 Nucleotides)

SEO ID NO:1733: (Length of Sequence = 321 Nucleotides)

TITITIGITI GITIGITIGI TIGITIGCAG AGICTICCIC TIGATCIAC TCCCAGGCIG AAGIACAGIA GIGIGATCIC GGCITGCIGC ACCCICTACC TCCCAGGIIC AAGCAATICI CATACCICAG CCTCCIGAGI AGCIAGAACC ATAGGCACAC GCCACCATAC CIGCIAACIT TNCIATITIT AGCAGAGACI GGATTITGCC ATGITGGCCA GGCIGGICIC GAACICCIGG CCGCAACIGG ATCIGCCCAA CTCAGCCTIC CAAAGIGCIG GGATTACAGG CATAAGCCAT TCATGIGCGG TIKITCAACI

SEO ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTTGCT TTTTTAAAAT CTATTATCTG
ACTTAAACCT ATTCAGCAAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG
TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

SEO ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC
CGGACGCCTG TNCACCCCCA GCCCTGCCCC TTGGCCGCAG AGGCCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC
AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGGAACCCCC CCCACCCCGC CTTCAGAGCC CTCCCCCTTG GACTAGAGCG

GCTGGGCAGA GCTCTAAACA GGGGCAGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCCTGGAA GGGGCAGGAC CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTTGGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCCAGCAC TTTGGGAGGG
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA
AAAATTAGCC AGGCATGGTG GTGCGTGCGT GTAATCCCAG CTACTCAAGA GCCTNAGGCA GGAGAATCAC GTGAACCTGG
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEO ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTCTAA TGATTTTAA TTTTCAGAG GAAAATAATT TCAAGAAATA AAACTTAATT CCCCTGAGIC CITATIGAAT
TAAATATIGA AAAACAATGA ATGAATGAIG CATTCTTATT AATGGACTGT AAGAAACTGA TATAATGGAC TTCATTCTAC
AATTCGGTTT CITATIGICT TACACATGCT CCTCGAACTT AAACATTTTA GGACCTTAAC ACCATTTCCC TAGTACAATT
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGGN AGATGTGAGG
AGCA

SEO ID NO:1738: (Length of Sequence = 316 Nucleotides)

GECACCCIGG GCATGICCAG CCIGGAGCAG CIGGAGCAGA ACTIGGCAGC AACAGAGGAA GGGCCCCIGG AGCCGGCIGT
CGIGGATGCC TITAATCAAG CCIGGCATTI GGITGCTCAC GAATGICCCA ACTACITCCG CIAGGCCCAT CATGGCTCAG
GCIGCCCAAG GCITTINIGI CACCICITIT GITCTCTCAC ACTGACCAGI CITGGCCTTA AGCTGACTTA GAAGGGITTI
TCIGAATTGI CIAGATCCAT GCATTATTIT TCIAGCTTCC TGCCTTGCTC CCTATTCACT TTACACTGIG AAAGGT

SEO ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTCGAGGCC GAGGTGAATA TTACTCCAGA GGGTCGAAGC TATAGAGGTT
CTTTATGGGA GGGCCTGGC AGAGGGTTGG TAGGGGGACA CACTTCGAGA TTATCCTCAG TATANGGGC AATAAGCC

SEO ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAAATCA GGAAGAAAAA AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG CCATAATTTA AAAWTCAAAA AATAATAGAT GTTGGCGTGG GATGTGTTGA AAAGGGAACC ACTTTACACC TGCTAGTGGG GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAAA AATCAAGACT TGICATAAAN TGIATGICCA TAGCCIATAC TGITTAAATT ACINIAACIN TATAGIAAGI CITGATGITT AATACAGCAA ATGITAAACC AAGCITTCAC TACAGAAATA AACAGAAATT TATAGGCGCT CATTATCCIT TIAGACAAAG TIGIATTIGC TITGCIATIR TITITGITTA GCNTTIKTGC AACTATTICA CAAACAGGNA CAAWRATATT WO 93/16178 PCT/US93/01294

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TAAATTGITA ATAGAARTIT CCAGITITCI TIAGICICIG GCIACICCAA GTACIGGIIG CIGIGAATGA CCITITCAIG

SEO ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCCAGCC AGGAAAAAA AAAAAAGCTT TGAGGAATGA GAGAGGTGA GATGGGTCGA AGAAGGTGCT GGGCAGCCAC
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCGCG
TNAGTTTCGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAACTNC TGTTCCAGGT CTTCTTCGCC GGCGTCCGAA
CCCTCCAAGT GCCCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG
CG

SEO ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGTIAGGG GCCCAACGCA GTCACCGCCG TCCGCAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCGTAGAGC
CGCTTGCAGC GAGAACACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA
GCACCCTNAG CCATCGCGAG TTTCCGGGCG CCAAAGCCCAG GAGAAGCCGG CCATCCCGCA GGNCCGNGTC TTTCAGCGAG
ACGNGAGTTT

SEO ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTTCTTTA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG
TTAGCCATTA ACACAGNATA AAGAWGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTCGKCCGA
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GGNGCAGGCA TGGCACCTTT CGNCACGCAG AGCAAGCATA
GGCTGTA

SEO ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GITAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCCAGGG ATGCCCCCAG GCGGCCCAGG TTAGATGCGT CCCTTTGGCT
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTTGC
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGGNNGCAG CAGGAATCAA GTGGGCATT

SEQ ID NO: 1746: (Length of Sequence = 472 Nucleotides)

TTCATGCTGT CCCTTCATTG AATTITAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG CTGTTTGCAG AGATGAGGC TCAAGATCTG GNTCGCATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT TCAGAAGAAA TGCAATTTGC ACCTGGTGGA CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACCTGG ACCCAAACAC TGAACTCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTTTACC CAGCTCAACA AACGGGNTGN CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTTNCTGCT TGCAGCGTTT TGATNCCGGA AGGCCATGGT AAAATTTTCA GTATTTGCTT GTCAAAAANG GGTTTTAGGC NCCATTTGTG TGGGAGGGGA AG

SEO ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTITAATA AGATACCAGI GICAAAATAC ATITCCITAT AAAGITAAGC TCCCATACAG ITATAATGIT GICAGTAGGA ATICGACAAT ATAATAACGI TCATGAAATC GITACGITGA CAGGTAGGGI TAATATGAAG CITGGAATAT TTTCCAGTGI TITAGTAAAA CIGCAAGGGI AAAATGCCCT TAATGCCAGG GCAACACAC CAGGNAATCA AATACCAGCA

TTTACACENC AGTAACCCTT CAAGTTCTGC CACCCTGTGT GEGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACCNA ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTICA GCIGATIGGG TGAGICCTAT TCATGITATA AAAGGTACIC TGCTITCCTT AACATTCCAT AAATGTTAAT CACATCIGCA AATACCTICA CAGCAACATC TAGACTAGIG TITIGACCCAA CAACTGGGCA CAATAGITTA GCCAGCTTTA CACATAAAAC ATCATCACAC TATGCTICIC TICTGTGTIC TITIGTTACCA CGTATCIGIT CCATGTGTIT TICTITGTAT ATATCCTATC CTGTCATATC TCTCCTATGG TITIGTGGGAA ACTATAAGCC TTCTGGGGGG TAAAACACTA TATCTTTGTT CAATTGTTAA TACATCGATAT AGCATATCAT GCCTGGGGGC ATTGGTTAAA CCCCCCATTT AAATACAGCT NGGCAGCAGG ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEO ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA

AAGGCGTGAG CACNCACACT CACACCTGGC CCTCAACCAT CTCTTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT

TTCCCTTGAG ACTGAATGTT AAGTCAAAAA CAATAAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTTGCTTCTT

TAAAAATTCC TGAANITATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAATT GTAGACACTG TGGGCCCCCT

GGCCATGTTA TTTTCAGATG GGGCAAGGGG ATATTCCTAA CCTATTTTTA AAATCATGCC AGCCTAGATA ACTATGTGAA

AAAACTATTAG GGTGCTTAGC AAAACTATTA CCTAGCACCC CTTTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEO ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATITIAT TICCAGGITG GCACGIGIAT AAGGCACAGG GGCAAATGGC TITGGGGICC TGGAACTGGA AATGGAGACAGGGGIGIGITCIC AGGIGIGCCC GCCICCACCA CCCCCTAAGT GCACTTGAGA CAGGACCAGT GGIGGIGGIT CCAGCCCAGG GICCTGAAGG GINCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC AGGAGGGCC CINTCCTCCT AGGGGGCGAG GCCAGCTCCA AAGIGCTING TGGCTCCCCA GGCTTAAGGG ACCAGNCTGC CAGGGAGGGCC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC TNTCGGCGGT ACTCGTCATG TGGGTAATTT GCCAANTTC

SEO ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCCTTTT CACCAGGAGC TTTGGACCTG CGCAGGITGT GGCATGTAAT CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC TCCCCCCAGC TAATGTACAC ACTGGCATT TGCATGCCTT CCTCACACAT GGGGCCACCAG CCTTGCTTCA GAACCACCCA AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC AAGGCAAATT CCACAAGTCA GGCAGCA

SEO ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATICIA GCCATACAGA TICAATGGAA CAGAGAAGAG AAAGGAGGIT CCATTGGCAC CATAGIGAGC CATTCATTIG
CCCAGGGAAG NNEGIGGGG CIAAGGGGCT AGGITTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC
TCTAGITAGIT GGCTCCAGCA CAGTATGAGT TAGGIGAGTIT AGGIGTAGGA GITTGGGGAC AAGGAAAAAG GGAGGAGGGG
TCCCTAGAGG CINGGIGCCC ATTACATAGA CTCAAATTCG TCAATGCGCT GCTTTAG

SEO ID NO:1753: (Length of Sequence = 402 Nucleotides)

AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC
ACCACCAGTG CCAACAGCCT CTTCCCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG
GACGGTTCTC TGCTAGCTCC CTAACTGCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG
CTGGAGGATG GCTCAGCTGC TGACTGGCCC CGGGGTGTGG ATCCCGTGTC CTCCAGGAAT GCCATTGGTG GAGGAGGGAT
TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCCTGACCCC ACAGTCCTTC
GT

SEO ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTIGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCCT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA
CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA
AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTTCCATT TCTATTTTCT ATGGTCACTA AATTGAAATT ACAACCATTG
TAAAATTTGA TATCATTAAA TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT
TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEO ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TITTGCTTTT TGCACTGTTT GINCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG
AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAGG GGTGCGTGGA GGAGAGGCCT GGGCTCCTCT
ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCCAGCTG ACTGAAAACA AGGACAGTCA GGGTGAAACT
TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC
TNCAATCTAG CTCTGACTTA GGTCAAGGGG CCT

SEO ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC CCCTTCCTAG CCCCTGTTCC CTCCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT TTGAATAAAA CACAAGCCTC CGTT

SEO ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGG TGANCACCAC ACCTGAGCTA ACTTCCTGG TTTTCAATCA AACCATCTTT GTCACTTCCT GTCCCCACCT
GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT
CTGCCTCCTG GGTTCAGGGG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC
TACTTTTTCG TATTTTTAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCCTGA CCTCGTGATC
CACCTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTATTG
GGCTATTCCT TATTGAGATC TAGGG

SEO ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG
GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCCAC CCAATGTGTT
TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCCACCA GGAGCAGGGC
AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCCTG TNTCGTCAGG
GAGAGGCCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGG
GAGCAGT

SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTIT TITGITAAAT TICITIGIAT TITTITCCIG CAAGACTICG TGITGGCGGC ACIGITGIAG TITAACTICA
ATCCCAAATT CCATGAAATA GAAATCAGAA GIAAAGGITG AGAGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA
GAGITIGACT AGAAAAAAAG AAGAGGGIAT GIGIGGIGGG CAITCCIGGG CAAGGCCAIT CCITGAGGGA GGGGGTIGGC
AGGCAGCTIG CCTCIGCCIC ATGCAGGGA GGGAGGAAAG ATCCCCTGGG GACCCIGCAG TCCCCTCITC CIAGGGCTIC
CTGCTCCCAG GGGAAAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CIGGCOGGGT CCAAGCTGGC CAAGAAGAG GAGGAGGCCA TTGAGAAGGC CAAGCGCGAG GCTGAGCAGA
AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGAGAGA AGACCAAGAG CAAGCGCAACAC ATGCGGCCAT
CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCCC CTACATCGGG CCCGACACAC CTGCCCTTCG GACTCTGAGC
GAGTACGCCC GGCCCCACGT CATGTCGCCC ACCAACCGNA ACCAACCCTT CTACATCGCC TTAACCCCACG GACCC

SEO ID NO:1761: (Length of Sequence = 378 Nucleotides)

SEO ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGITCAA AAAAATCIIT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGICATTCI CATAAAACAC
CATTIGICAT TIGAATGCGI GCATIGIGGC CIGITACIIT TAACIAGICT CACIAATTIA TAGITATATA TGATGIAGAT
CTAGATTGIG ATGIACACTA AGIGGGITGA TCCYGAGATC AAGCIATGAT TGCTGCTTGC GTAAAGIGIT CCYTTIGGGA
AATAAATAAT CITICATATC TGIAAACTIT GGIATAATTG GTTATTTATG CAATGIATTG TTGTGGTTGI CAACICAAGA
TTGTATTCIC ATCTGGGGAC ATTATGAATC T

SEO ID NO:1763: (Length of Sequence = 157 Nucleotides)

GIGIWIACIT AGIGIGIAAA GIGAACAAGA AAAGCAGCAT AATAAAGGAG CTGIGITITT ATCAGAGGAG CCTTCCTTCT GAGIITTIAC ATAAGTTGAT GCCTTCACTG CAACTITGAA TACAGTGCTT TGAATGITGA AACACTTGAA TAAAATG

SEO ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCIGC CITCAACTCC TCCAGCITCT NACCACTTGG CAACGCACCA CTGCCAGITC CTCTGGGGCT CTCAGAATCA CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC TTTATTTCTT CCCTTCCTTC TCCTTGGTGT ATTINICCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GGCCTGCAGG GAGCAGCTTT T

SEO ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCACGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTTGGGA GTTCGGGACC AGCCTGCCCA GCGCGGAGAA AACCCGTCTC TACAAAAAAT TTTAAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

SEO ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAAATACT AAGACACTAA ATGCGTATIT TAAATTIGCC CATTAAGITI TGGGCTGCGT AAGAAATTAG TAAAAAAATAT
TTCCAAATAA CATGCAGAAG TIGITITTAA ACTTAAAATC TCATATITTA GCTACACCCA CAGCGATGCT ATAGAGAGGA
GCTGGATTTC GTTGTATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAAA GTTATTTTAT GTACGATCAT TTTTTATATG
ANGCATATGA AAAATCACCC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA
CCATGTTATT CTTTTTATGC AACAGAATGC AGGGTTGTGA GAAGTACATC AAG

SEO ID NO:1767: (Length of Sequence = 330 Nucleotides)

GETGACAGTG GCGCCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCCT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG GTGCATGAGC AGACCTCGTA ACCGTCCTCC GAGCGGCTCT GGTCATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCCGTGGAC TGTGGGTACC CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG CGCATGCGGT

SEO ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTGEAAAA CCAAGACTGG TAGACTCTCT TTTTCTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA
ACACCIATCT TTTCTTCGGA GGACACTAAG TTCTATTTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA
AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGINTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC
TTTTGGGTTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG
GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEO ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACOGC AGOGCCAACT TCAGAGAGCA CATOCAGOGC COGCACOGGT TTTCTTATGA CACTITITGTG GATTATGATG
TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGOGGTC CATCATOGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT
CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA
TGAGCCATGG CATTGGGACA GGGTCACTTC TGACAGGGGA AGTGGGTCCC CAGGTCAGCC CTTCTCTTCC CTTTGGGCTC
TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTTGTTTGTC ACACGGTCGA GTTCGTATTG GGTTCTCGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTITAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCCTTTGTCC CAGCCTCAAC
TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG
CCCGTGGAAG GCTCAGCCTC TCCTCCGCAT CCCTCCTCT TCCTGCCTAT CGGAGGGAGC CAGGGTCCCC TAGGCTGACC
CTGAATCCTC TTCCTCCCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CGGACCACA TGGCTTNGTG
GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGGCGNC GGCTTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

CAGAAAAGGC AAAGITIATT CCAGTGITGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT
TCACCTAAGA GGTAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCACGG
CTCAGGCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG
TACACGGCCA CATCAGGCTT NCCGCAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC
AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEO ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGIGCIGG GACIATAGGC GIGAGCACIT GCATCOGGCC TAGGIGGGGI TITIGCCCCG TICIGCAGGA GGGAGACIGA
GGCICGGAGG TICAGGGCCT GCTIGGCIGI ACCCAGCCCC AGIATGIGCC TIGGCCACAC TAGICAGATC CITCCCCTCC
CACICCIGCC ACCCIGCICC TGCCCIGICC CATAATCCAG GIIGAATGGG GGIGGGGATT TINGGGAGCA AGGAGGGCTC
AAAGAGATGG AGATAGGNCT GIIGICAGGC CAAAAGIGCA A

SEQ ID_NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATTC
TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAACTAATT CCTGAACCAA AAGAGTATTT CTTAATCCAA
AACTTTACAG TATTAGACCT ACGAATTCTG ATGATGCCTG ATCAGATGCT AGTTGTTCTC GACAATCCAT GCAGTTTTCC
AGTATGAAGG AAAGTAACAA ATATACCATG GTTATTCTTA TTTCTTTCTG AAAAATATCT AGGATATTTT ATAGTGTCAT
GTGGTAAAAT ATTCATTTGA CANTCACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTTGTTTATC
C

<u>SEO ID NO:1774:</u> (Length of Sequence = 230 Nucleotides)

TCTGTTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG
AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAAG NNCTTGCAAA AGTCAAAGGA AGACGGNAAA CTCCCTCTTT
TGGCAATTCA AAGGCAAAGA CCTGTTCATT TATTCTTAAT TTTNCTTTAT ACAATCATTA TCCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG
GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC
CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTTAAAGACT TTTTCCGGCA TCTTGAAAAA AACCACCATT
ATTTGACATA GGTAAAACTG AAAAAACAAA CTATTCATAA TTACAATTTG TGACACATTA TGTAGTAGCT AGGTTCATCA
CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTTCAG

SEO ID NO:1776: (Length of Sequence = 375 Nucleotides)

GECAGAGECT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA
ACTCCCCCCA AAATTTTAA TTTGGTTTGC ATTTCTTTGA TTATGTTTGN GGTCGATTGA GACTTGAGGC TGGCACTGGA
GCAGGGGTTC CCACCTGTCC CGTGAGGCAA AGGTCGTGGG GAGTGACCAA GTGCATCAGG GGGTGCAGAT GCCCTATTCT
GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCCTGGNGAG
ATAGATGTCA CTGGAATGGN CTTTNTCCAA GTGAAAGGCC ATCTTGTGCT ATGAC

<u>SEO ID NO:1777:</u> (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCACAGC TGCAGGCATC AGCCGGAAAC TCCAGGCTGC TCATGGTCAC TGGGGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCCTT GATCTTGAGT

CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT GCACCAGTCG GTGTCGACGG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTCGTCTG CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEO ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCCAACT AGAAGAATAC AATTAAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATTCACTT
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACCACA CCTTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEO ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTIWAT TGTYCTATAG ACACTTCIGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG
NGGAAAGCAA TGAGCTCCAC CCTAYTCAGC AGA

SEO ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA

TCTGTTCACC TGTGGGTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCCTGCATT GCTACAAGAA AAATAAGGAC

ACCGGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGGGTATTAA TCAGCCATTT

TTGTGAGAGT TTGACCCTGG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCCAG CTTGCATGAA ATGTACAGAG

AAATGTGTGG TCGTATTTTT TACTTTTGTC TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC

ACCTCCCATG TAGCACATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCICAGATI GIGAAGGCT CIGTAGGCTA TGITAAGGAC ACTAGAAATC TATIGAAAGG TITITAAGCAG AGAATTGACT
TGCTCATATI TITINCTICAA AAAGCTCAAT AGCTACAAAA CGGTCAATAG ATGGTAGCTI TGIGGGGCTG GGGTGAATGC
AATGATATIG CAAAACAAGA TATAGGGAGA CAAGAACTIT TAATAACCTA AACCAGTGGT TCTCAAACTI TCCATGCATC
AGAATCACCT GGATGACTIG CGAAAACACA AATAATCAGA CITTAATCCCT ACATTITCTG ATTTAGCAGG TATAGAATGA
GGTTTAAGAA TITCTAACAA GTTCCCAGAT GGCGTAAGGT GTCTCTCAGG GTTTTTACTT GAGCAACTGG GTGGATCCNG
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCCGGTC AGATTGTTT

SEO ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGGCAGT
TGGGGAGAGA GGTCCCAGCC CAATTCTGCC CAGAGAAGCT CCCCAAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA
AGGGGTGAGA CCCAGGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG
GCGGTCCCTT AGTCTCACTG AAGTTCTTGT AACTTNGGAT TGGGGCCAGG TCANCCTCCT CTGATACCCG AGCTACAMAT
CTGGCTTCCC AMITCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

AGAGCTTAGC ATGCTGTTGG TICATGTTTT TATGTGTTTA TITCACATTG ACTITTGCCG TGAGCTTTGA GGGAGACAAC
ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATTT TCTTACTGGC CATGATGAAG
AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTTGATAAAG TTAATTTGCA AGGTATCATT CGATTGGTAG
AGTTACCAAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT
TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA
TGGGGTGATT TAAGTAGGAG CCNGGGT

SEO ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAA AAAGTAGATT ACCAAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT CACCCAGAAA AAAATAAGAA AGATAAAAGA TGTTGGTAAA ATAACTAAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG GGATAGATAT TGATATTCAT TTTCTTTTTA CAACTTTATT AAGTTGTAAT TTGTGTGCAA CAGATTGCAT ATATTTGANG TATATAACTT GACTAATTTT GACAAATATA TACACCCATG AAACTACCAG TTATAATTTT AAACATTTTC ATGGCCCTCC AAAGTTTCCT TGTGTCCTT TGCAATACAC GCAAACACAC ACACCCCACA CACAGTATGT AGGGCAACCA TTGATCTGCC TTCTGTTACA ATAGGGTAGG TTTGCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GIAAACAGAT TACATTIGAA CACCTAAATA AGIATTIGIT TCATAATCAT TACATGCTIG TITATGATIT ACAAAGATTI
GGIAGAGAAA AGIACAGICC TITAAGGCATA TATATGCCAA TGCATTAAAC TACTCAGCIT TIGIGCCAGC TCAGGIGITC
ATAGGAACAG GAATGIGGAA TACCAGCITT TIACITTAAT TATACITTTA TGCTGAATIT TTCTTCCAGT TAAACCITTA
ATTACACTAG TATGIAAAGI AGITACTGAG AAAAATAAGI TITIGATTTC CCTTCTGTTG GATCTGTAAC ATTTTTAAAT
GGAGCTATTT AACACATGAC ATGCTAATGI TACTTAATGG GTCTCTGCAT TITAATTTTA NGAAACACAA ACCTGGGTCA
CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GITATICCAA CCAAAATTIC CTAAGATTGA AATGCAGAAA CITACAGAAT TGAGTAAAAA GACAAAAAACG TAAATACTAA
ATATIGAAAA GATGCAAGIN CICCCCAAAT ACACCATAG ATTTAATAAA ATTCAAATTI AAAGGCAATT AATTAGGGAT
GAGGCAAGAA TCIGGGAAGA AAATTAATCT GAAGITTGIC TGGAAAAATC AATGGGGAA ACGAAAATAT TTTAGGATAA
GATTAATGAG AAGTAAAATT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN
ATGITATACA AAGCTACGIC AAGGCTTGAG GATAATTTIN TTGAAGATAT TCGTGGGTAT CICATTGGCT ATAAAAG

SEO ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCCACAATT GACAATATAT ATGCATGTGT TTAAACCAAA TCCAGAAAGC TTAAACAATA GAGCTGCATA ATAGTATTTA
TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGGA TTCTAGTTTA GTTTTTTGTA ATTGCAAATT ATATTTTTNC
TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCACGCAA AGGTAAATGC
ACACGTTTTA AATGTGTGTG TTGCTAATTT TTTCCATAAG ANTTGTAAAC ATTGAACTGA ACAAATTACC TATAATGGAT
TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA
CACTTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCCTGCACA GTCCCACCCC AGGCAAGGGG TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCINGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTC AGGAGGCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT
ATATTTCATT CATTIATATT ATTITITITAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC
TCTAGATTAA GCAACAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGITTCCYTC ATTAGCTGTA GACTATCCCC TCTCCTCCCA CCACAWIGIT TCTWTGATGA KITACAAACA GAAAGGAAAT CACATTITCA TACTAAAAAC AAAATGWTCA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT GCAACACCTT AAWICACAGA CTGAGACCTC ACATTYTGAC CTGGAGNITC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG GCCTAGGCTC AKGTAATACT GACACCCACA GGCGCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGIGIG TITIGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTCCA ATGGAAAAYT
CACGGCCCAG TCCCACAGGA ACTTTGCGGC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTT ATCGCTGIA TAAACATCTC TGGTCTGIAC ATACATTTCA TACATCGIAG GGTGGGAAGC GAGGCCAAA GGGAGGCCCA GCAGCACAAC AGCTCACCG CTTTCCCTAC AGCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT GCTGCCTCTT CCTCCCTGGA AAAGTCACTG TTATGGGGAG GGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT GGTGGGGAGG CCACATNTAA GTCCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTOTTEGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA
GGCAGCCCTT CGGGTGAGGG CCTGGGCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACTT
GGCGCCCCGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC
AGAAGGACCT TTCAGAATGA NITGTTCCCG TCAGCAGATA CCGTCAAGAC ACGCTGGCT CTGAGAGGGG CTGGGTGCCC
GTTTTGCCTG TATTCTCCTG GGGGCCAGCA CGTCTCAGGG GGTGTCCCTG TGGGTCCCCG GGGTCA

SEO ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAAACATGC AAATTGGGCC GGGCACAGTG GCTCATGCCT GTAATCCCAG CACTITGGGA GGCCGAAGTG
GGTGGGTCAC CTGAGGTCAG GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT
TGGCCAGGCG TGGTGGCATG TGCCTGTAAT TCCAGCTACT CGGGAGGTTG AGGCGGAGA GTTGTTTTGAA CCCGGGAGGT
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

SEO ID NO:1795: (Length of Sequence = 418 Nucleotides)

GAAACGCTAA GGITTTGACA GCGITACAGT GAATICICCG GCTGIAGAGA TIGGAGGAAG TOGGGAGAAA TICGTCTCTA
AGTTGIAAGG TGGAACAGCA TICATITICT TACIGCCAAT GGAGGITITT CATGAATTIA CTAACICAGT AAAAAGATTC
GGCITTTTIT TITTAATCTT AAAGGATCAC GCITTAAACC TCIGIAACAA AGTAATTATT TGIACCACTC TCTACCCCAC
CCTCCAACAA AATAACCTAT CGGNICTCAG AAAATAATAA CCCTTTGCCT GCCTTGAAA TAGITATCCT TTTTAGIATG
ACAGTGTTCA AAAATTCTTT TCTTAGACTT GIAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTC
TAAGACGAGG GGGACTCC

SEO ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTITATIACA TATGCAACCI TECCATECCI GCCAGITAAC TCCCCTCCCG CCAATGITAT CCTCATGATA TCAGCTCCCI
CTIGGGGCCA CTGAGCIGCC CCCCTITCCT TCIGGGCIGG AGTAGIGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA
TCCACAATTA ATCGICGCAG TTCTCTTAAA AGTATTAACA CTTAAATAAG CACTCTIGGG GAGTIGCAAA GGATATTCAG
GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCCTCAG
AAGGIGAAGA GGGACCCTAT TCIGGGGCTT AGTGTGGGTG GGGCATATCC TCCCCAAACT TGTTCTGTGG GCGATGTTCT
TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTTGATC
CAATCCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGINT CAGGGGGTCC ATGTAGCAAT
CCAAGCAATT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAAA GAATGTGCTC CTAGTAAGAA
GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTTCTC

SEO ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGGTCCATT TITACAACAN ATACATCCAA AACACTATAT AATANNITIT TITACAACAT TITCCAAATGA GAAGATTGCT
TITINCCCCCA CTACTGCTAT TCACACACAG TACTTCCACG GCACAATACA TTAGGAGATC TAAAANTGCT CACCCTGTAC
TCTAGGCTGC TTAGGAAATG TGAAAACTAG NAACATTTAT AATGGCATTA GCTCCTTTCA ATACAAGGCA ACATTTTAGN
AACCT

SEO ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGITAG GCTAGTTAGA AGGACACGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTTGA CTGCTCTTTC ACTCATTTTT TTATTCACTC AACAACTATT TTTGAKTGNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA GAAGACTCTG AAGATGAATT CCCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEO ID NO:1800: (Length of Sequence = 309 Nucleotides)

GECATERGAC ACTAGECCAC AAGOGATAAG CACAGGCACC TGACTITTAA GITTTTGITT GITTGITGIT TCCCAAAGTG
CTGATAACAA TAACAACAAC AATAGGATTC CAACCAGGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGITGGGGCC
ACCACAATGC CAAATCGTTT CIAAAGGAAG CIGAAAAATG GGACTGTCTT TTGCCCCACTT CGTTGTGTTA AAAGGGGACA
TTTGTNCAAA CINCCCAACC GAGTTCTAGA AGNTCCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

SEO ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANITAC TCTGCAAAAT TAATATATGA TITACCTGCT GTINICATAA GATTTCCAAA TAGACAAACT CGGTATGCTT
NGGATTTGCT TTACATTCTA AGTGGATTTG GAGGTTCAGG CAGGCGCCAA GGAGTNAGCC GAAGTTTCAT CANGCGGAGA
TGTTGG

SEO ID NO:1802: (Length of Sequence = 281 Nucleotides)

CCAAGGAAGT GAATGCAAAG CAGCAGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCCTGTCCC CTGACTCTGG GTGCCTCTAA GACTTCTNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTTNTTGC CACCTTTCTG TGTGGGCCAG NCTCCCGCCA GGTACTCAGA GGCCGCTCAG AGGGCAGGGT T

SEO ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTCACAGITA TAGITGGGGA CATTAACAAC CCITTCTCAA TAATIGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA
CAAGAACTGT ACAACACTGG CCGGTGTGG TENCTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CGGGTGGNTC
ACTTGAGGTC AGGAGTTCGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT
GGCTGTGGTT GGCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA
GACCAGCCTG AAAAACATGG TGGAAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGTNGTGCGT CTGAAAAAAT
TAGGTAAACT CCGTCTCAAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCIGAAGC TCAAAGICIC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACIGG CTAAGAACAG ACAAACITIC CIGCITCAGA CCACAAAGCT GACCCGINIT GCCAGACGCA TGIGCAGGGN CCINITACAG CCAAGGAGGG CCGCCCGACG GNCTTATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCTTCCTAA GGNCGNCAAG ACTCCATINA AGATTCACCC TCCTGGTGCG GCTGNCCCTG GGAACTAT

SEO ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATEG CEGAGGCGG CAGCACGACE GGCGGCCAGG GCCGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG GAGCAATTTT MTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTCGGGG ACCTCCAGAC CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCCT GCACACCGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCCTCATCC GGAAGGGGGC CGAGGTGGAT CTNGTGGACG TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GIGCAGIGIG GCCAGATCTI TICTAGIAAA AIGIGIGITA CIGATGGGCA GACAGCTCIC AITCAAGCAG TGACAGATGI
AAGCNCITCC CATTITIGIG GCCCCATIGI AITCAGCGIG TGGCITCCAA GITGCCIGGG ATCATCICCA CCCAGACTAA
GGAAGAGGAA AGAGCITGGA CAACIGCACI TGGCIGGITT TNATGGATCA GGCAAGGAAT TGGCICCAAC ACATTAGCIC
ACATTCCATI GGITAGAACI GGGITTCICA ACTATTAGIA CAGGGIGAGI GIAGGGITTI GGCACCATGG GCATTTGAGC
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CIGIGAATGG TGTITATTGT TGTGAGGAGC TGICTTGIGC
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

GICCTCAGCT TCACICIGGC ACCACTGIGA GCACCGGGAA ACCIACCAGA AGITGCIGGA GGACATCGCT GICCTGCACC
GCCIGGCIGC CCGCCTCTCC AGCCGAGCTG AGGIGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA
GIGATGATGC AGTATGIGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TGCGGAGTCA TGGAGTITTAA AAAGCTTGCA
AATCAGAATT CAAGCCGCAG CIGIGGCCCC TCIGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA
GAATATGCCT CGCCGGAGGG TCAGCGTTGC TGIGGTTCCT AAGTTTAATG CCCTGAATCT GCCTGGGCAA ACTNCCAGCT
CATCATCCAT TCCTCCTTAC CAGCTT

SEO ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGIACTITIC CATTIAGATI CAAATGAGC TAAAATTAAG AGITTTATGA GCTGITAAGA ATGAGGTAGT TICTCCTAGG
ACCCCCCAAA GACAGTGCAA GTAATGACCG TITGGMTCTC ATTCGTCGAT CTTTGATAGT ATGINCTGGA GTCTACTCCC
CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTTGTCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGGNCT
GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT
GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT
GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEO ID NO:1809: (Length of Sequence = 401 Nucleotides)

OGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG
ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG
AGCGGAAGGG CACCCTCAAC CGCGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC
TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGGATCAT CAGCAAAGGC
ACCAAGGACT CTCCGTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TNTTACAACA ACAAGTGCCT GGTGCACATC
G

SEO ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTAGAAGG ATTAGAGAAA GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCCTG ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAAA GAATTTTTGC AAAAGGGGGG CCAGCAAGGC ATT

SEO ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAGA GIIGAACTAT GIACATIGAA AAAAGGAAAG ACATTITITC ATACCAACCT TICCCIAGIT CGCAGITICI
GAATAGIAGA AACAAAACAC ATTITAAAT CITICTATCA ATTIAATITA GGACGAAGIA ACACAACTIT TATAATIAAC
CACIGAAGIT GICTITAAGG ACAAAACTIA AATTITAAAA TEGGIGITAC CATATITINAT GAGIGGACIG ACTICAAGGI
TGCCTIGCIC CAAGNNIGGG CATCGIGACA TIGCCGIGAT GCCCAGAAGA AAGITAATGG CAATGATGIC CAGICAGAGG
GCAGACATGC TACACATCAC AAIGATGAGA GCTGCGGGAT TCIGCCCICT TCAACTICCA AGIAGNAAAT TATTATTITIC
CATTCAAACT AACTGGGAGI GAG

SEO ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC
ATCACCCTTC ACCTCACCCA CAGGTGGCTC TCGGGGGCTG GTCCATGGGC GGCTGTGGGG TNAGGATGGA GTCCTAGCTG
TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG
CCTGGGGCTT CAAGAACCTC CCATCTATCC CCATTCCTGA GACAGGAGTT ACAGTCCCTT TTGGNCCTNA CATCCAATAA

AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEO ID NO:1813: (Length of Sequence = 344 Nucleotides)

SEO ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTITTGCCA GGTGGCCCTG ACACATAGGA ATGCCCAACT
ACTGTGACTA CCCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCATTTTG GAGGTCATGC
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCCGGTG CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTCAGCAA
GGCCATTTTT ATTTTCTGCA GAAAGGGTAC ACTTGGCAGC AGTTTTNCCA CGAGAGTACC CCGAACAAAG GAGACAGGGT
CATTTATAAC CTGACGCGTC CACCCTTCTG CTGTGTCCGG TTTCCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEO ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTTNCAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG AAGGAAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAAA AGTACCAAAA ATTTCAAAAAT TTTGTTAAAC TGTACCAAAAT CTGGNTACGA AGCGTTATTT TTGCCCACAG GGCACTTCCC TGGAAAGNCG TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

SEO ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGIGGG AGGAAGGATC AGCIAAATCI GAGGGAAGAA GAAGGAAAGG AGAGGACTA TIGCATAGCA
GAIGCAAAIG AAGGGACIGI CITATTATAC AGIITTATCA TCIGITAATA CICATAATCI TGITTCITIT TCAACIITTA
TATAAATTIA TCITTACATT AGIITAAATCA AAAATCITAA AACACATTIT AAACGIGGIC ATAGGITACT TITATATATT
ATTGAATTIA TAATAAACAT GITTCITINC TGGAAACIGG GAIGGNACCN CGAIGGIGIT TCITGAATAT AAGAGIGICC

SEO ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TINCCAAACA GGCTTTACTA AACCCCCTGA
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT
TAGAGTCCCA AATCTGCCAC TITCAATCTG TATGGCCTCA GGCAAGTTAC TTAANCTTTC TGTCTCTCTG TTTTCTTTAT
AAAATGGGGG ATAATAATAG TAACTTCTTC ATAGGG

SEO ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCCT GGGTATCCTA GCTAGCAGCA CTGTCCTCTT CATGCTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCCACA GCTGGCTGTGCCC TGTGTAGCCT GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG GGTGCCAG

SEO ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATECT CTGCACTCGC NCTGGTACCA GGCCCGCGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG
CAGACCGCC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG
GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTINGGC CAGGGCCTGC TGCTGCGCAG
CTTGCAGGAG CGCAACCAGG AGCAGGAGAA GGTGGAGCGG CGCCGTCAAG TCCCCTTCCA ACTGCACATC AACCTNGAGC
TGCTTGGAGT TTGTTTTANC TGGTGTCTGC CATGTTCCT

SEO ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCTTCT TCAAAGAAAG CTTGAAAATG AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEO ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTIG AGCCAGAGIT TAAGCCTGAC ACACAGGCTT TGGTCCTCAC TGAGCTGTCT CCAAGACTGG AACTACTTAG
TGACTCGGCA AATTITCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTCAT GAATGTTGGA
ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTTGGGGAA GGCACTTGGG ATTTTCTGTG TCTTGCATTC ACAGAGGGAG
GCCATTTCAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEO ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTITG TCTITACIAC ATCTTAAAGA ATTAGAACTI GGGITGGTGI AAGTGACTIA CITCCAGGEN ATCATGCTCT
ATTITCIACCA GCAGGICATA CCCNAATGTC ACACTATCTA TTGTTAACCA TGAATENTAT TCAGATCTAT TACTTTTCGT
GAAAAGTGGA ACATGTTACT TCCAACCATG GCCTGTCACC GTGAGTGTGA TCANCTTINT CCAAAACCAC ATGGGTCGCA
GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTTA GGGAAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA
GRAACCCGTA AATGGCTTAA AAAA

<u>SEO ID NO:1824:</u> (Length of Sequence = 340 Nucleotides)

GIGAGIGGCA GGIATCATGA ACCACATIGI GGACCIGGAG TIGCIAGGAC CITTICIGCC ATTACACAGA AAAATCCICC CIGAGAACAC AGCCATINGA GGNCACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGIGG GGGCINACGG CIGTAATCCC AAAACTITING GAGGCCGAGG TGGGCAGATC ACCTAAGGIC AGGAGTICGA GGCCAMCCIG GGCAACATGG TGAAACCCGI CICTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGITG TGGCCAAATT CTCAGTCCAA TCACCCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC
TTCTGGGGIT CCTGGTCTGG AGGAGTCTCC CCAACAGCCGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAACTTTGA

ATGAGAGGCA AATCTACCCT GAATGCACCT CCCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC
TCCCCCATCTT CTGGGGGCCA ATTCGTCTGG ACACTGTGCG GTCANCTTCC TTTTTAAAGT GCCAGTATCG GTGGGGCAGG
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

COGGCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CCTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGGG GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

SEO ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCTCCT CCCCATCCCA CCCTTTGGTA ACTCCCCCCC CCAGGNCACT GCCCAGATAT ATTCTTCTCC
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCATTCT TTCTTTAATG AGTGTCAGGG ATGGGGGATG
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTTGTGAT CCCCNTTTAA ATTTTCATGT
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GEOGOGOGOT CTEGAGOTEG ATGTCCAGGO TGOGGGOGOT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCCTGCCG
CGGATCAAAA GCCAGACCAT CGCCTGTTGC TNGGGACCCA CCTGGTGGGG ACCNCAGCGG CTGAACTCGG GTGGCCGCTG
GGACTCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCCAGGC CGTGGACCAG GAGCTATTTA
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTTGCTACAG CCATCGCCAA GGCATATCCC
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCCTGGTCA T

SEO ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGITG GCIGCCIGCA GGAGGCGCIG CAGCIGGCCA CITCCITCCEN CCANCIGCEN CICGGGGAIG TAAAGAACTG
AGTIGGGGAAG GAGGAGGCIC CCACIGGAIC CATCCGTCCA GCCAAGAGCI CITCATCIGC TACAAGAACA TITGAATCIT
GGGACCITTA AAGAGCCCCT

SEO ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCCGACT ACTGATTCAA ATGCTAATCC TGGACGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT
TGGGAGGCTG AGGCTGGTGG NTCGCCTGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC .
TAAAAAATACA AAAATTTGCT GGGCGTGGTG ACATGCGCCT GTAATCCCAG CTACTCGGGA GGCTGAGGCA GGACAATCAC
TTGAACCCGG GAGGCAGAGG TTGCAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCCATCC
CCCCACCAAA AAGCG

SEO ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA
GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT
CCCCAACCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCTNT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA
TCCAATGTAT GGAATTTING TACAGCAGCC CCAACAGACT AAGNTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA
ATGCACAAAT AATATCT

SEO ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCATA ACAGCCACTC TTGTCCCCCC
TTTTAATAGA AAATTGTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG
ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTTGGAAGC TGGGCGCCCA
GTGC

SEO ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTITGCC AACATGGCCA TGTTGAACCA CCTGCGCAGG CCCCCGTCCT GCAGTACCTG TACTACCTGG CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCACTTNACC AAGGAGCCGC TGATGGAGGA GTACAGCATT GCCACCCAGG TGTGGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC GG

SEO ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAAATT ACAAAAACTT AAAACCGAGT AAACAAAACT TCAGAAAGAA TGAAAACAAT TGGAAAAATAA CITCAAGAAA AAAATGTAAA ATGGAAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAAC AGAGGTTAAA GTCAGAATTT TTTTGTNC

SEO ID NO:1836: (Length of Sequence = 377 Nucleotides)

CECCTGENAC CACACCCAGC TAATTITTET ACTEITAGCA GAAACAGGET TICATCACET TEGCCAGGCT GETCTGEAAC
TCCTGACCTC AAGTCACCCA CCTGCCTTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA
TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGAGCTGT TITTGAGAGCA GGGAATTTAG GATACTTAGG
AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACTAA GGGAGAACCT TAGAGTCCTG TGGAGCAGAA CCCAGCATTT
GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATACCGGGGT CAATCTT

SEO ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC
TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAGTTGT CCCGATTATG
TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCCTG GAGCTCCTGC AGTCTGCCAC
TCGCTNCTTC TGCCTGATAA CAAATACTAT TCCTTTTATC CTTGCAACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA
AGGCCCCTGG GAAACGAAGG ACTGGAAATN TGAAACCACT GGGCACAGGG GGAATGGGTG GGTCTGAG

SEO ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTTAAATT ATTTGGCTAG ATAAAACTAC CAGCTAGATG GATTTATTTG GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNINSTAGGGA AGAGGACITT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGGAATAGAC ACTAGGACCA
AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACTTAAAA AATTAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA
CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTINTCAC AAAAGGGTGT
GAAATGATCA CTTCAAGACT CCCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGG GAGGTCTGGG
CTCGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCGT

SEO ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA
ATTGCCTTGG CATCCACCCT TGGCTCTATG CCCTCCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAC
AAGAGGGAGC AACACTTCCT GGAGGCCTGG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTGCCTCCT
GCAAAANAGT ATTTINICCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCCTGCGGCC ACCTCCTGTG CCGNCCCTGC
CTGGGTNAGA AGCAACGGTC CCTGCCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGAAAA CCTATTTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG
GTGCCTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTTAGGT TATTTGAATT
TCATCTCAAT TAAAAAACCC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCCGAGGCA GACGCCGCAN CCGTGGGAGG
GATGCTGAGC CA

SEO ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGITTA CTGAACININ AGITTCCTCC TGCACACACC GGGCATGACA CCTTCAAGIC TGNCCAGCAG
TGGGTCCAGA AAGIACCCTG TGTGCCTTGG ACGCAGAGGC TACAGITCIN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC
CTCGGGAGCT GCCCCTGGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG
TGGGGT

SEO ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTIATICCA AACAAAATIG AGGIAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC CCACACCAGG CCCCGAGCAC CGCGGGCCCG AAGCAGGCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC TTAAGCCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGAGGAGAC CCCCGCTTCAG GTGGGCCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCACTTCCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CITCGCTTCT NAAAACCAAA CICCAGCCGC TGCCAGTCGG GACTTGGTCG CCCGNCGCTG CCAGAATGCT CCACTGCCAG CCGGCCCCCC TGCCTCGGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGCTCCCAGG GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCCAGACG CTCCTCGAGG TGCCCAGGTC TCCAGGGAGC TTCTGGNCCA AGENCGTCTG AGGGATCTGC TCCTTAACCN CCCA

SEO ID NO:1845: (Length of Sequence = 441 Nucleotides)

SEO ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGARTICAT TGIGIATITA TIATICACAG TIAATCACTA CCTACCAAAT GCTATCCGCA GAGITAAAGG ATTAAGTACA
TAGGICITTA TITAAACACT GATTITITTI TITAAATATA TACACACAAA ACTIAGITCA GCAAGGCTIC ATGATATACA
CCAATTCCAA AATAAAACAA TCAAATGGIC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC
AGGATGAGGA AGAGT

SEO ID NO:1847: (Length of Sequence = 3. :leotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC: FICACTCG CAACATTCCT CCCACATCCA CATCCACGAC
GGAGCCAAAT CTCATTTGTN ACCCTCAGTC ACCACCCC: GATGGAGG CNCTGGTTAC GNCATGGATG ACAGGTGTCA
TGCACAGGGA GAGAATTINT CCCCGGATAC CCCTGAGG: GGACACTCCA CATCCACGAC
GGACCACAC CCCCAGGCTA GGGTGGGAGG ATTTAGAGCA

GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAGA. AGGCAGGC TNGGGGATTG AGGGCAGGAA GGGCT

SEO ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGIGCTGTAT GCGGACCCTG CCATTGTCAT CATGGACGCA GGCCATGACC ATCATCACCA
CCCATTTINI TGTCTGAAGA GAATCCAACT GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC
TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT
TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTCGGGTG T

SEO ID NO:1849: (Length of Sequence = 318 Nucleotides)

GIGAGICCCC CAAGAGGGGC CICAGICACG AATGICGATG ACCAGIGGGC ACAGGIGGAG TGAGIGCTIG ATGCCCATGG
TGAAAGCAGG GATGIGGGGC TIGIGCACAG TGANCIGCTG GACCICGIGG GAGCCGGGGC CAGGCCGIGG CGIGAGGICC
AGAGGGIAGG CGAAGGCITG GCCATGCTGT AAGIAGGGCT GCGGITCINA TAGATGGATG GCTCAGGICG GGCGTACGIG
GIAGGICCAG GGCCICCIGC CACATCCTCC TIGIAGANCC AGITCITGTC CCTGGAGGCC AGACINTAGC AGGGAGCA

SEO ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTITCCCT CCAGTATGAT GATTIACTIT AAAAATGAAC CCAGAGGGAC GGGCATGGIG GCTTATGCCT CTAATCCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTCAG GAGTICGAGA CCAGCCTGGC CAATATGGIG AAACGCCTGT MICTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG ACTCACTNAA CCCTCGTGGT GGAGGTCGCA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA GAGCAAAGAC TNCGTCTTCA AAAAAAAATA ANAAGGGAAA AAAAACCCNG NAAAAGCTTT TTTATTGTTA AAAACAAGTG GGTCAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

GAGCAGTAAG GACG

406

CTGAGGGGCA TTTTTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA
ATATAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCGCCTA TCAAAAAAAG
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG
ACAAGGAT

SEO ID NO:1852: (Length of Sequence = 174 Nucleotides)
GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCTGC ACACCTTTGC
ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCACGA GGCCCCAGCG GCCTNCTGCT CTTACNAACG

SEO ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACAGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCCACAT ATACACACA ACATATACAT

GGACCCATGC ACACACAGG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC

TGCATGTTCA CACACGNGGA CGTGCACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG

GGGGTTGGCT GT

SEO ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC

TGTAAAGCAT TTGGATTTCC TTGGGGAAAC AGCCCTGCCC TCTGTCCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA

GTGACTCATG TTGGTTCAGT GATTCCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT

TGGGGCACTG GGCAGTTTCA CATCCTCAAG GCTTGGCCAT CATCGGGG

SEO ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TTGATATTT AGITATTAAT TCATATTAAC TTTGGCTGAA ACTTTTAAAT TCTATTGTGA ATAGTCAAGT

AAAATTTAGA TTGTTACATT CTGGGTTAGT ATTAGATTGT TTTTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT

TTAAATAGTT CTCTTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCCTGGCT

GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEO ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCCTA

AAGAAGAACC CACTGAAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGCGCCGGA ACACCATTCT

TCGCCAGGCC AGGAATCACA AGCTCCGGGT GGATAAGGCA GCTNCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA

GAAGGCGGCG GTTGCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAGGT AATTGGCAAT AATCCTTGCG GGAAGGTCAG ACTCCTCTCT TACAGATCTA GGGAAGGCCT GGTAAAATGA

TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGGC CCTCAAGCAT AGGCAACGAA CTTGTTCCTG

GCTTCACGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTTG TAAACACATG CTGGCTGCCA GCAGTGGCAA

GTTAGCCTCC TGACCCACTT CTCTCCTGCT TTCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

TAAGACTICC TGITAGIAAA AGCTACCTCA TGAAAAGTAT TGATGITATT TGCCAACATT TAGACTAGCT TITGITACCG
TTTCAGITAT TCAATTIAGI CAGCACATGI TIGAGIGICT TACTGCAGGI GAATAATCCA TGATTICTGC CCCAGAGIAG
TTCATAAGAC TGGTAGGATA CATAGATTIG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT
ATAAAGCAAT GTGCAAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEO ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTIATTIAG TECTGEGECT TIGGAAGCAA ATGIACCIGA GTITGAATCI CAGGGATAAC CITITGACTG TEGCCCTGGG
TAAGITACTC ACTGICTCIG AAACTICAAG TICCTCATAA ATAACCIAAG ATGGACAATC ATAACTCICT CITGGATTGA
GGIAGGAGAA TATGGIGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TICCTAGAAC TAAATTAAAA GGAAAACCCT
AATTITCCAT GCCTAAGIAA CAAAAGGACC AAAGGITACT COGITTGCAA ACTCCCACCT TITCTGCATG GCAGATGGGA
AGTTGG

SEO ID NO:1860: (Length of Sequence = 294 Mucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCTCTCC
TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA
CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG
AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCCCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

SEQ ID NO:1862: (: -h of Sequence = 296 Nucleotides)

TTCGGCTTCT TAAAGITC.: CCCATCCCTC CTAAGGICTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG
ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGAGAT
TCAGAGACGT AAGATCTTAG CCCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT
AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEO ID NO:1863: (Length of Sequence = 259 Nucleotides)

CARAACAAAA AGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGACTACAAC TAACTCGTGC TCTCCACGCT CAGGCGTGGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTCTGAAC GINTAGCAAT CAGGTCCCCT GTAATGTGCT TGGAGAGTNT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGGAA GCAGAAGGGC ACAAACAGA

SEO ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCITACCA ACAATGCITC CCAACTGCCI CAAAGCTCTC CIAAATGAGA ACATAGITCI TICIGAGCAA GGTCCIGIGG ACCATGAAGA ATGICACCAA GCTCCCCTCA GAGTCAGCG GAGCTCAGCC AAAGCACAAG TGCAGTGCCC AGCTCCTCCC ACCTCGCACC TGCTGCCTCA NACTCCCCCAC GCTGAGCCCA GGCCCCTACC CTCTGAAGGI GTTTCCCATG TGATTCTGAC ACACACACCC CACAAGAACC AGATGATCIA TGNCATACAG CATTTAGCTA

SEO ID NO:1865: (Length of Sequence = 236 Nucleotides)

CATTICTGIT ACATTGAGAC TICAGTCACC AACATCIGGI GGCAGAGATA CAGGIGIATG AAACATTICT ATITACCCAA
ATATGCCAGI TCCCAAATAG GATGACIGCA TITAGIGITA AACTGGCTIT TCTCATTAGA TACTCTAATI GAGGAATATI
TAGCITCTIG AATAGAAACC ATCCAAATGA TGITTTTITI TIGATATGIC TGTAACTATA AAAATCAGCA AATAAG

SEO ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT

TAATGAGAGC CGCCGTGCAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG

AGCCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC

GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCCCGAGG GCGCAACCCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT

CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA

CCCCTCCTCC ACCCTGGACT GGCT

SEO ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG

CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTTGAAAA GTTGGAAGAT TTTGCATCTT ATTGAAAAGA

ATTTTTCAAA AATGTTTCTG TACAAATGAA TGGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC

GGTCACCCAC CAGCTT

SEO ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCCTGGAG GGTCTCCCAG

CCCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCCG CCGAGGGCGC GGWTGCAGCA GTGWAAGCAG CAGCACTAAA

CCTGGTGCCC CCCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG

GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTCAN GGCACCINGG NATGCTA

SEO ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTTGGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG

CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCCT

TAGCTCATAC GGAATGGACA GCCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA

ACTGCCCAGT GGAGTNTTCA NICTGGAATT TCAAGGATTTT NIGAATAAAT GCTTAATAAA AAACCCCCGC AGGAGGAGCA

GNTTTTNAAG CAACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGGN

TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCATGGN TGNTGGNGTT TAAGNGTTTT

SEO ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TITGITAAAC ATCIAGGITA AAATGGITAA AAGGATTITC ATACAATTIT AGGCACTATA CACGITGITT

ACAACAGCAT TGGTACTIGG ATATGGGGAA AGATAAATCC GACATTITAA TATCITGATC AATTIGIGAC ATTCAAAATA

ATTICCATTIA AGAAACATTA ATCAAAACTI AAAGAGACAT ACCACTAAGI ATCCCACACA GIATACTGAA AATAAATATA

GNAATACAAC CAGAAGTCTA CAGNICACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTIT TCATGGGCAG TNAAGGGCTC

TGGGCTAGAT TTGGGTGTCA ACTG

SEO ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG

CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGT CCTTCTCACT GGCAGCAGCT GCACTTCTCT GCTTCTGCCT

CAGCTGCCTC TCCGCCTTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCGCAGGCA GCAGGAGCAG CAGCTCTTCT TGCAGGAGGT GCATTTGCAT CCCTCGCACT TGCAGGAG

SEO ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTIGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCCTCG TGACTCCCCT TCCCTTATAA GGGCCCCCCAT
GATTACTCAG GGCCCACCTC AACCATCCAC GGTCATCTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC
CTTTTGCCAC GCAAGGTAAC ACTTTCCCAC GTCCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TINCACCCAC
CGTCATCAGT GAGGCGCCTT NAGGAGGGGC T

SEO ID NO:1873: (Length of Sequence = 332 Nucleotides)

CASCITATAG TECAGIGGGG CAATCTCGGC CCACCACAGI CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT
CCCAAGIAGC TGGGACIACA GGCATCCTCC ACCAIGCCCA GCCAATTITT TGCATTITTC ATAGAGAAGG GGCITCACCA
TGCTGCCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCACAGCCG
CGAGCCCCTG GACCCGGCCT ATAGTTTTTG TTTCGCTTTG TTTTTGTTTT TTGAGATGGA GTCTCACCCT GTCANCCAGA
TGGGAGTGCA GC

SEO ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGAA GGGGCTGAGT CTTCCCCTCC CATACATACC TCACCCGGCC CCCAGCCCAC AGAGAGGCTG AGGGAGGGGC TCTGGGTCCT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCCAC CTCTAGGATC TTTCCCCCCAC CCCAGCCCAC CTCCAGGCTG GGGAAGGTGA GGAATTCTTT CCTCCCACAC CCTACCCCAC CTCACCTGCA GACCTGCA GCCTGTGCC TGGGCCTAGGAC GACCCACAAC CCCCGACCCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GRITTOCACC CACCTOGGCC TCCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGGGCC TGGACAGTCT GCCCCTAGAT GAGTTGCCCA GCACGGTACA GCTACTGCCT GCCCCGACCC CAGCCCCTGA TTCTACCGCC GCTCGGCAGG GGGACGGCCA GGGAGAGGTC CAGCCGCGCG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCIGGGGACA AAATAGICAG CAAATICTCA AGGGGAGAAA ATAAAGIACT TCCCITCTGT TAAAAAAAAG TCAAGAGACA
AATCITTCCT CCCCCATTCT CACTAATAGI TATTGAAGGG GAAAAAAAAA AACCCCACAA CITTITAAAC TAAAGATAAA
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTITTGT TACTCTGCCT TATG

SEO ID NO:1877: (Length of Sequence = 340 Nucleotides)

TITGAAGAAG AAGAAGITGA ATTIATCAGT GIGCCIGICC CAGAGITTGC AGATAGTGAT CCIGCCAACA TIGITCATGA
CITTAACAAG AAACTIACAG CCIATITAGA TCTTAACCIG GWIAAGIGCT ATGIGATCCC TCTGAACACT TCCATTGITA
TGCCACCCAG AAACCIACIG GAGITACTIA TIAACATCAA GGCTGGAACC TATTIGCCTC AGTCCTATCT GATTCATGAG
CACATGGITA TIACIGATCG CATTGAAAAC ATTGATCACC TGGGITTCTT TATTITATCGA CIGIGTCATG ACAAGGAAAC
TTACAAACTG CAACGGGAGG

SEO ID NO:1878: (Length of Sequence = 326 Nucleotides)

GAAAAACAAG GAAAATAGGC AACAACCTGC AATGGACACT TTTCTCTACA GAACCTTTC AACCCTGAAT TGAATTGTTT
CCTATTCATT TNCTAATAAA AAGITACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC
CATTAATAGG ATTTGAAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT
GAGTTTTGAG GCACTGTTAC TTCTAAACAT CTCTAAGGTT CTATTTNCTC ATCTAAAGGA GTAATATTAC TTTCCTTAAA
AGGTTG

SEO ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTGCAGCG AGCCAAGATC GTGCCACTGC ACTCCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA

AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCCT TCCCTCCCAG ATGAACTGTG

ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEO ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCCTCCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG

GACAGCAGGG CTGGACACCA GTGCCCGAGT CAGCGGCCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA

ACCNGGCTGG CACTNGGCCT GCCAGCCCTT CTGCCAACGN CACGACCATG TAAGCCCCCT CCGCGGCGAC CTCCTGGGCA

ACAT

SEO ID NO:1881: (Length of Sequence = 156 Nucleotides)
GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT
GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEO ID NO:1882: (Length of Sequence = 210 Nucleotides)

TITITITEA AACGAAGICI CAGICIGICA COCAGGCIGG AGIGCAGIGG CACGATCCCG GCTCACIGCA ACCICIGINI
CCCAGGCICA AGCIAGICIC CIGCCICAGC TGCCCGAGCA GACGGGACIA CAGGCACCCC CACCACGCCC GGCCAATCIC
CAAATGGIIC TITITITICCG GAGTAGIAAG TIACAATATG GGAGATTATI

SEO ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTIT TCCAACCACA TICCACCAGG TGGGTGTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG

CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTC ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG

TGGCTGCTGG AAGCCCCAGG GCACCGTGGG AGGGACAGGG GAACGTCCCA GACC

SEO ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCITTCCCT CTATGICCCA TCACCICGAC ACTCTAGGTA ATACCCCCIG TTGGGCAGGG GIGAGCICCC AAGGCCICAG

GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCCACAT AACTGTTCTC ACAGGATAGA GTTGTACACT GGTGCTTACA

GCTTTCCTGG GCCAGTGTTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTCGCGTGTG GCGGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAGGG

AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT

GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAACTGC AT

<u>SEQ ID NO:1886:</u> (Length of Sequence = 208 Nucleotides)

CATCCGCATA GIATTIACAT CATGGGIATA GGCAAGINCI ACAAATCAGG NCTTINCCIT GGGGATGGAT GITTGGAGCT
AGITTACCAG CACACCAGIG GGIAAAAGIG AACAAATACI TITTIGATCC CACAGAATCT TAAAAAATAC TITACITCGA
AAAIGICICI ACIAAGIAAT CATATATATA TATATATNIG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTITACAC ACCIDENCE ACACACTICA ACTITICITIT TACACTIGAT GITTICIATCA CATCCTGAGG ACCACTAACC CACCAGCAG TCICCCCTG ACACACATIC ACGIAGGICC ATACCCTICA GAGICCIAAA GGGITAATGA GAAGCCACCT CAGCTITGGI GAATGGAGCC CCAGCCCCAA ATCCCCTCCC CTIGCAAATA TGGGACAAGI AGGGAGAGIC TGATGGAGGC ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA CCTTAACACC AA

SEO ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGCGGGCGA CCTCATGCAC CGAGACGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCCGCTACC TGCTGGACCA CGCCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEO ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACTITACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCCACCC CCAGGCCGCA CAGTCCGGGA TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTGCAGCA GGCGCTGAGT TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGCCAGGAG CCNGGGCTGG GGACCCGGCC GAAGACCAAGG GGGCCCAGGA AGCCTCTTTT CCGAAGGNCT T

SEO ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGET GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT
CGTGAAGCAG AAGGCCTTTG AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCCGTGGT GGACTCGCTG GACATCGAGA
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG
CAGTGGTACA AGGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEO ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GINTGGGAGG AAGGTACTTG GAAGACCCTG
CCAGCCATCT CCCACCCAGA CTTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA
GACAAAGGGC CCTTCTTNAA GAGAGGAGCT GCAGAGAGGG GCAAAGGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTOCAAGGTC ATCCAGTCCG TOGCTAATTA TGCAAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGCGGTT GTTCCTGGAC TCCAAGCACC
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTTCCACA ACCGGGTCTC CGAGTGTGGC
TGGGCAGCAC GGCGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNCTGGCTGC GGCAGGACCA
CAAGAACGTC TTC

SEO ID NO:1893: (Length of Sequence = 487 Nucleotides)

CCAGATAGAG TITCIGITIT TNAGITITAC ACGIGCCACA TCAGGGAAAG TITAGGITATG ATTAAAGCAA GAGATGATAG ATGAACAAAC AAAGAAACAA CAACAAAAAG CCCATGCAAG AGGCAGAAA AGAGGCTGAC TGGITAAAGA ACAGGCCAGA TITGGACAATA CTGATCAAGA GGGGTCACA TITGAAAGAA CAGTGCTITA TICCICTACT GACTAGAACT AAAGGGATTT TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTCG AGACCAGCCT NACCAACATG GGTGAAACCC CATCICTACC CAAAATACAA AAACTTTINC CGAGCGTGGG CCCGGCGTTG GTTGGCTCAT ACATTINATN CCCCCNCTTT NGGGGGCCCCA NCCGGGCGGT TCACCTTAGG GTCAAAGGGT NCGGGGNCCT TCTTGGC

SEO ID NO:1894: (Length of Sequence = 283 Nucleotides)

GETGETGAG TEGGETETEG AGAAGCTEGA GCTGACCAAG TACGCAGACA AGCCGGCTGG CACCTACAGC GGCGCAACA
AGCCGGAAGCT CTCCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCCACCAC AGGCATGGAC
CCCAAGGCCC GGCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG
CATGGAGGAG TGCGAGGCCC TGTGCACGCG GCTGGCCATC ATG

SEO ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG GGAGATAGAT AGTCACAGTT CCCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTC ACCTGGNGAA TTTTCTCCTC CCACTGCCCT AAACACTTTA TTTCCATCAC AGGGGAGAAA TNCTGCTGAG AAGG

SEO ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTTTAAA AGAAATTAT TACTTGTTGC AAAGGTCTTT TTAAACCAGT TTAGATTTCA
AGAAAAAATA AATGGAAATC ATCGAAAATT CATTTCACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT
GTGTGTATAA GTGCACACAG AAATATATAT NCATATGTIG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA
CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEO ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGITTAT GITTITATTI ATGIATITINA ACIGACITAT TIGIGIATCC CACTAGAACA ATACATICAC AATATACTIG CAGAACIGIG CCIGGGGAT CATGGGAGCA GAGAACITGI CCAGIGAATA GITGITGAAG AAAGGAGTAA AAWCICCCCC AAACCCTAAA GGCATCCTTT TCGTAGTIGIG TGTCCCAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGNICCC AAGAACCAGA GTCANGGAGG CAGACAGCAG GGKTTATTAA GGTGCACA

SEO ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA
GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCCTGCC

SEO ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCCTGCC CGGMACTCCC GGGGGAACA TGCCAAAMAG CCGGGGATCG AACCCAGCCC ACCTGTCGTG GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

ACTIVITATI GITAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT
TTCTGATCAA CTGATGATTC TRACCCGCTT CTTTCTCTCT GGGGGGTAAG ACACTTGTTG TTGAGCTCTG GGGATGATGG
AGAACGACTC CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCTGGGG AAGAATCACA TTCGCTTCTC CCTCTAGATG
GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCCAGACCC ATCTCTAAGT
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTCATTT CAGGAGAAGA TGCAGACTAC
TTCTT

SEO ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATTCATA TECTAGITTA TITATCTTAT TATTGAGAGA TAATTTCATG ATGACAGITA TCAATAATCA ATTACAATAT
CAAGAAATTC AAAGAACAAA ATCITGCAGA GACTATGCTT TIGTATTTGG ATTTAAAAAG TATGTGATCT CATTTTCACA
TACCAAGCTG AGAGGCCATT TAGACTATCT CITTGCTAAT TITTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT
TTAG

SEO ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTIAAA AATAATAAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC
AGTTGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTW ATATACGGTG AATATTGCCC AATTATAGAT CTGGATTTTA
AACCACTTAA TGAAGCGGCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GGCTGTTCCC AATGTTTACA
TTATTTAATC TTGCAAAAAT GGTTCTGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTTTTAA TGTTGTTATC
CTTGGGTGT

SEO ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTITATATI CCACAGICAG GIGGGICIGC GATASTCAIT TAAIGITAAA CGCCATCAGG GGCCICTCCI CCCGITTCIG CCAGGGGCIT TICTIGICIT CICCITGGIC ATCATCATCA TCGICTICCI CICCICGIG GGCAGATCIT CICTGGIGGG GGCTGGCTGC TGGCTCGAG GGCCACACTT CCCGCACGC TGGCCAGGC TGGCCACACTT CCCGCACGC ACCCCACTT CCCGCACGC ACCCCACTT CCCGCACGC ACCCCACTT CCCGCACGC ACCCCACTT CCCGCACGC TACACCACGC TACACCACGC CGGGTAACCC CGGGCTCTCC TGGGGCCCACACT CGCTGCCCCC TTGGACGGC CGGGTAAATTC T

SEO ID NO:1904: (Length of Sequence = 423 Nucleotides)

GICTGICGGC CCTGTCTGAA GIGACGGTGC AGCCAGGCTG CTCCCTGCCC AGCAACCCCG AAGCCATTGT GCTGGACGTC
GACTACAAGT MIGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT
TAGTGAACTT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA
GATCTCCTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCCGGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT
TTCAAGAACA TCTTCCAGCT TGTCGGCCTG GACCTCTTTG TTTTTCCCTA CCGCGTGGTG GCCACTGCCC CTGGGTTCGG
GGTGATCGAG TGCATCCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATTITIAC TCTITGGGCT CTGGGAAGGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA GAGGAGCTAC AGGGGGGCTGC AGTCCTAGTA CCCTGTTGGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGGCT

CCAGTCCTGG TGCCCAGTTC TNACANCTGC CCCTCCTGAG TTCACACTGG AGTCCTTGCA GTCCTGAAAC CACAAGGCCT NCCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT CCTGGGGCTT GTGTCTTTTC CTTGGCAGAA GAGGGCACAG CCAAAGGCAA

SEO ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCIT CATTCAGIGA GGAAGAAATG CITTCACTCT GGGAATTCAC AGCATCCCAA TCTGACGITG TACCCGIGIG ACACTGITTG TGAGCCCCAA GITTCAACGA GCTCTTGCAA GTAAACGGAC ATTCGTCACA TTTGTAGACA GCTGTCTTTC CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAAGGG GCACTGGAAC CTATTCATGA ATCINCTAAA TGGAATCCCC TTGGTCTCCA ATAATTTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA CAGGCCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTC TCACTTGTCT ATTTCATTTA ACTCTTCATC AGAACTAGAG TCATTAGCAT GCTGT

SEO ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGTT GGTTGGGTGG TGGTGATGTG ATACGGTTTG GATGTCTGTC CCCTCCAAAT CTCATGTTGA ACTATAATCC CCAATGTTCC AGTTGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG GATTCATCTG TTTTCTTCAC TTCCCTTTGC ATCTGAGATC CTGCTGGAAA CCAC

SEO ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCCG AAACCCCTGC TTGGGAAGGG
AAGCTGTCGG GTGGGCTAGG ACTGACCCTT GTGGTGTTTT TTTGGGTGGT GGCTGGAAAC AGCCCTCTCC CACGTGGCAG
AGGCTCAGCC TGGCTCCCTT CCCTGGAGGG GCAGGGCGTG ACGGCCACAG GGTCTGCCCG CTGCACGTTC TGCCAAGGTG
GTGGTGGCGG GCGGGTAGGG GTGTGGGGGC CGTCTTCCTC CTGTNTCTTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA
AATGACCAAA TCAGTATTTT TTTTAATGAA ATATTATTGC TGGAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG
ATCTGCCGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTITA TTAAGGATIT CAGGITACAT ACITCAAATT TCIAGAATG AATGGAATCA TITTGGAACT
GGAAAAATGG CATAAACACT GACGICCCIT AAAACITCAA TITTATAAAG AAAATTCITC TGCAAACCAC ATCCCCITTA
TGTAACAAGA CTAGGIATTA TCIACACCIT CACITIGGCA ATAGCTATTI CCTAAAGAAT GAAAAAGATG ATTTINCTAC
TTCAGITCAT TAAAAATGGG ATTCTATCIT TGAAGITCAG AAAAAGCTGC ATTTCGATGA ACTATGGGIT AAAAAAAAAA
GCACATAGTG TCIAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCCAG GTGTCGGCAG CCCAGGCCTC CATTTGCTAA TGATTAATAC
ACTGTTTGGG CTGGCCAGTT TTTCATGCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAA AATGAAAAAT
GAAAAAACAA ATTCAAAACC TATTCAAATG GGTTCTAGTT CAATTTGTTT AGTATAAATT GTCATAGCTG GTTTACTGAA
AACAAACACA TTTAAAAATTG GTTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC
CACTGGTAGG ATGGTCCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGGC ATGCCCGTGT
ATGTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEO ID NO:1911: (Length of Sequence = 342 Nucleotides)

AATGCACCCA TITGGCIGCC AAGAGCITCT CACIGCCITG CIAGCAGCCI GCCACIGINC CCIGGCAAAT TGAAACCACC CACGCAAACA CICAAAAACCC CAATCICCIT GCIAATAAGA TACAACCAGI TAACACCGIG AAAAATGCAC ATCTCCAGCC TICATITCAA AAAAGAGCIC TGIACIAAAAT GCAATATGCI TITAAAGGGG GITTIACAGG GACCAATCIC AATGCAAAGA CCAGIACCAG ATGICIGAGI TITGGITACA GGITTATAAAT TAGACACAAA ATTCACTCCA CACIGGAGIT TIACTITCAA GCTGGAGITA GCATIAGITC TA

SEO ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTT AATACAAACT TAAAAAAATC TGGAACAATA GAAACTGTAC AGATTTGATC AATCTTTTTG TTTTGTTTTT
AAACTAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAAA TATTGCACAA CATTCTGAAT ACAAAACCCT TGATTGTATT
CCTCCINCAC TAAAGAAAAA AGITCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC
CCTAGGGAGA AAACTAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT
CAGANGGNTA ATCCACCTTT TGGATTTGTT CCTGGGGAAA GAGGGGTAGA TAGAGGGGATG

SEO ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGI TITIGCTCGIT GCCCAGGCTG GAGIGCAATG GCGTGATCTC AGCTCACCA AACCTCCACC TCCGGGGTTC
AAGCCATTCT CCTGCCTCCG ACTCCCGAGT AGCTGAGAIT ACAGGCATGI GCCACCACGC CCAGCTAAGG CTTTGTATTT
TINAGCAGAGA TGGGGTTTCA CCATGITGGC CCGGCTGGTC TCAAACTCCT GACATCACAT GATCCCCCCG NCTCAGCCTC
CCCAAGIGCT GGGATTACCG GTGTGAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTTAGG GCGACGATCA ATGAGGATTC
TCTTCTCTGA GTFACTGCAT GTGTTACAGT TTATAATCCT T

SEO ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA
GAGACCITTA TCTTCCCACC ATTGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTCG AAAAGGTCTC
ACAGTAGTAA CCCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG
AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT
ACCTCCGCAG TGAAGGTGTG CTGGTGCGAT ACTTGGTATC CTATTTGACA TGTTGGGAAA GGGCCCCCAG CAGGCTACCG
AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGITTATA GCAGGAATAC TIGITCIGAA TGACITGGAG GGAAAGIGIG TGIGTATATG TGIGIGIGIG TGITTIGITAG
TTTTTGIGAG GIAGGGAGA CTATTTTTGT GGITCAGICA CICCAATTAT TGCCACAATG CACITTCCIT CATAACIGCC
CCACCAAAGG TCTTAAAAGC CATTTTTGGA GCCTATTGCA CIGIGTTCTC CTACTGCAAA TATTTTCATA TGGGAGGATG
GITTTCICIT CATGIAAGIC CITGGAATTG ATTCTAAGGT GATGITCTTA GCACITTAAT TCCIGICAAA TTTTTTTGGT
CTCCCCTTCT GCCATCTTAA ATGGTAAGCT GAAACCTGGG NCTACIGIGG CTCTAGGGGG TAAGCCCAAA AGGCCAAAAA
AA

SEO ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAÄATGAGAC TITATICIGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTTGGGGGG ACAGAGGGGA GGACAGGGC TCAGCCAGGG GGACCGTGTC TCTTTCCCAC GCAGGACACT GTGCATGGG CTCTGGGTGC ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTNAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT GCTAAAAGGC AGGCTGGCTT TCTGGGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA

GGGACCAGCA AGGGCTTGEN GTTGGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEO ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAAATAAT ATTAGGTGAC ATTAAAACTG
TCATAGAAAT AAACTGTATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT
GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAAT TTTGAAATTT
TGGACCCAAA ATTATGTCAG TAATTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC
AGAAACCGTC AATTAAAGTG TACCCCACAA GTGATAACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGIGCAGA ATGIGATTAG TITATTAATC ATATGIGAAA ATATTAGTAG CIACATATGG
CCAGAATAGA TITTYCTCIC TACAAATGTA AGTTAGTGIT GATAGAATTT GITATGCGAT ATTTGGITCT TIGGITTCAG
TCICAATGCI TTCITCITGG CATTTCATTG ACTCIGTAAA TTAACCTCAG CATCAATTTT CITTTAAATT CAACAGTTAT
TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTTA ATTGACGGG TTCTG

SEO ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTITTAT TGITCTATAG ACACTTCTGA AAAGAGATCI AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTGCAGAG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGNTGG AATTTCAGAA
CAGAGGWGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGITTAT TITITITATIT ATGIATITNA ACTGACITAT TIKTGIATCC CACTAGAACA ATACATICAC AATATACTIG CAGAACIKTG CCTGGGGCAT CAGGGGAGCA GAGAACITIT CCAGTGAATA GITTITGAAG AAAGGAGTAA AATCTCCCCC AAACCCTAAA GGCATCCTTT T

SEO ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA
AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT
TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAACTCC CGACCTCAGG CGATCAGGCTR CCTCAGCCTC
TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCCAAC
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEO ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAAG AAGCGGCCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGGGTA AAGATGCTCA CGCAGCCACC AGTGCCTCTG CCGTCCATAA GTGCAGTGTG ACTTACCCTC TGAGAGTGGC ATCTGCTG

SEO ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTTGT TATTTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC AAGANGCTAT TTACCCAAAG TGAGCTINCA GTTTTAGTTT TGCATGGCTG TTTGACTGCC TTTCCGCCCT ATGAAAATCA AGAAAATCTT TTTTAAAAAT GGAGTCCTGC TATTTTCCAC TCCTTGCAGA TAATACAAAT TCAGTTTGTC AGGTTGGATG

GREAGITIGG AGCTGTGATG GATCTGTTGG CGGGTTTTGG ATGTGTAAAG AATGATATAT ATA

SEO ID NO:1924: (Length of Sequence = 231 Nucleotides)

GUCCICCUTG ATTCICAACC TITIGCAACCT GCCTTCCGIC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT
AGGACCGGIC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNITTCCCAA CTCAGTTGCT GGCCCAGCTT TGGCCTCGTG
TTCCCTTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEO ID NO:1925: (Length of Sequence = 249 Nucleotides)

GITITIACIT AACCATICIA TIGITGGGAA TIGGGITTCC ACTITITINI TATAGATAGI GGIGCAGIGA ACATITITAA ATAGCITITI NCITCAGIGI AATTATITCC NIAGAGAAGG TIACCAAGAG TIGITTTACI AGITCAGAGG GCITCAGGAT ITINAIGGCI CIINCIAGOG GIGCICIAIT ATCCINNAGA AGACTIGIAT TACTICCAGI GTCAAGAAGG TIGCNCITCC ATGGAATGG

SEO ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT
CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGCGCTCCCA GGCCTATTAG GACGAGGAAA
TTCCCGCCTA GTAAATTTTA GTCAGACTGG TTGTCTGTTC TCAAACCCTG TCTCCTGATA AGATGTTATC GATGACAATG
CATGCCTGAA ACCTCATTAG CAATTTTAAT TTCGCCCCGT GCTCTGCCAT TTGCCTTGTG ATATTTTATT GCCTTGTGAA
GTATGTGATC TCTGTGACCA CAACCTATTC GTACANTTCC TCCCCTT

SEO ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTITIATIGE GGGCGGATAC CGCAAGGGCC CGCCCACGGT CAGGITAGIG TICTGCTCTT GCAGAGGCGC KACAGCCTGA CACCTCCACC TGCCACCGC CCGGGGTTAG TGGAACATGC AAAGCTCAGA GGGTGGAGGC AGGGTGGTC GCTGCTGAGA CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCCAAA GGGGGCTGGG G

SEO ID NO:1928: (Length of Sequence = 283 Nucleotides)

COCCTIGCT COCCTGAGOC CAGGIATGIA ATTOCTACAC ACACTGATOG AGCITGINIG TGIGIGIATA TGIGIGIGIG TGIGIGINIT AATGIGACAT GCATGIACIG ATCONGAGAA GCCITTATAC CAAGAATAGA GCTGGGATOT CAAGCCCACC CTCCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCACCA CAGGCCTTGI GTCARATGGC AGACGNIGCA GCAGGAAGCA GAACCACGG ACGGGERNCA TGGGATGCTA TKGGCAGCCA GCT

SEO ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTACTAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATENTCAA GCAAATAACT
TOCAACAGAA ACAAGANGAT ATGTTTTAAA ATATATTTCC CCTGCCCAAT AGTAAAACTT ATTTCAGGCA CAATGCATTA
CTGAGGTGAA ATTAAAGTTA CATAAAATTG AAAACATCAC ACTGGANAAC ATTTCATGGG GCTCAACTGA AGGTGGCATA
GTCCAGGAAG GCATTTGGAC ATGTATGGGG TGTTTTCTTG TTGCCCC

<u>SEO ID NO:1930:</u> (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT CTGCCAGCAC TTTGAGGCCG TGCACTCTGG CACCCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCCTCA TGATGTGGTG AACCACCTCA GCTGTKACGA GGCCCGGAAC

CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEO ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACCCTTCC CCTCCCTGCC CCACCCGGGT CCTGTGCTGG NTCCTGCCCC
TTCCTGCTTT TGCAGCCAGG GGTCAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCCTTTCCTG TTGGTGTCCC
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG
AAATATCAAT GAAATCTGGG GGT

SEO ID NO:1932: (Length of Sequence = 314 Nucleotides)

TITCATGGGI TITTGITTIG TITATITCGA ATACIGAAAA AGICCITIGG GCICTGIGG GITCCCCACG CICACGGCIC CITTCICCCA CACTCACIGC CCITCITCCC ACAGCAAATC TATTTCAAGG ACAGTACTIT TIAAAATGAT TAATGITGAG TICICAACTA GCICIGCAGA ACIAGAGGAG CIGITTGCAT CIGICIGIGC GGATGGAGIT TCITTTATCT GACACCAGGI CICCAACCAC ACIGATGCAA GGCATTITAT CIACAGAGCI CAACTAGAAC CCCTTITTCA TIAGGCIACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACAGG GAGAGCTGCT
GGCCACAGGT GACAAGGGGG GCCGGGTCGT CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGGG
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTTGACTAT CTCAAGAGGC TGGAGATAGA GGAGAAGATC
AACAAGATCA AGTGGCTCCC ACAGCAGAAC GCCGCCCACT CACTCCTGTT CCACCAACGA TAAAACTATC AAATTATGGA
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEO ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTIAAATTG ACAGCCTTCC ATTITTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG GTAAGCCAAG GTITTAATGA CCAGCCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCCAT CACATACTYA CCCTGGGAGG CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCACTTGGK GTAGGTTCA RGATCGCCTC TTTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTT TNICCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC
ATGACCCAGT TGAGGTGGTT GINTCCTTGA GTCTGTTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA
ACACAAAACA CCCAACAGGG ATGCACTCAA CTTGTTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA
GAAGGGGGGCT ATGGTGTGTC TGCATTCAGT CCCCTCACAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEO ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTITIAC AAATTATACC TAATGAGTAA AATTAGTGTA AAGTGATAAC ATGCTTCTAC CTGTATTCT AGTGACCCIT
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGTG AACAATAACT GACAGTATTG TGCTTGCTGT
ACATGCTGG TCTTTTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTCTAAT TTTATTCCTA
GGGCAAAGTA GACAGGGATT ATTTCCTTGA ATCTATTTCC AAATTAATAT TTTTTTCTTT GGTATTTCTA CACTTTAAGG
CCATTTGGTG CAATTTAGAA AGTGTTGGCC TCCCTTCCGC TAGCCACATT CAAAATTAAC TTCCAAAACC TCAGGAACAG
TACAAGGAAT TTGAA

SEO ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACTCTTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC
TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCACG CCCAGCTAAT TTTTGTATTT TTAGTAGAGA
TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACTCCT GACCAGGGGT GATCCACTCA CCTCGGCCTC CCAAAGTGCT
GGAATTACAG GCGTGAGCAC CGCGCCCAGC CTGTNTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA
ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTTATGACT TTT

SEO ID NO:1938: (Length of Sequence = 407 Nucleotides)

GECCTOCCTG TOGGGTGCAA TGCAGTGGCT CAGATCATAG CTCACTGCAG TCTOGAACTC CTGAGCTCAG GCAGTCTACC
TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG
CGCCCCTCGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACACG
TGATGGGCGG GCTCAGGAGA GGACAGGGAG TOGTGGTGGA AGTTCCACAG CTGGCCGCGT GGGGGGCCC TTGCACCGCA
CTTGCCGCCT CCTGACTGCC CCGATCCCCC CAGCCCCTGT GCCGGATTGC ATTTYCCTCC TNTCTYCCAG GGTACTGGCC
CCAGCAA

SEO ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAGIT AATTITITGT ATTITCAGIA GAGATGGGGT CTCACGATGC TGTCCTGGGT GGTCITGAAC
TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGIG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA
AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAAGACG
AAGGCTATAT GAATCCACTC ATATGAAGIA CCTCGATTAG CCAAATCCAT ACAGAAAGIA GAACAGTGGT TGCCGCGGGG
ACGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTTT TAGACGGAGT CTCGCTCCTG
TTGCCCAGGC TT

SEO ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCC TIGCCAGGG CCTCACATGC CCGGCTCCCC CAACCGGTCC TICCCCTTGG GCTGCCGGTG CAGCTGTGGG
CCCAGGCTIT GGCAGGCCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TIGCAGCATC GCCTCTCCCT CCGCCACACC
CAGGTCAGCA GAGATGGGGC CCCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGGC AGGGTTGGAG AGGAATGGAG
AGACATGTCA CCTCTATAGA AACGCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGGAAA
GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GGCCTCACAM CACCCCGCAG ATGAGCGTCT TCACCACGAA
GGTGTTCTTC GAAGTKGCGG T

SEO ID NO:1941: (Length of Sequence = 377 Nucleotides)

GICAGCICIA GAGGCACCCI GCATCATGCC CACCAGGGIG ATCCCCCTGG GAINGACCAT CTCGGGATAT GAGGCCTCGG
AGGCTGGGGI TGAGATTIGG TCCTGAAGAG CITATAGCCA GATTGCCACA TTCAAGIGIA AGTCCAGGAA AGGGGCAGGC
GGCAGIGCAC AGGGATTIAT CAGITCCAGA ACCTCACAGI GATAAGAGGC TTTAGAGAGC ATCIAATCGA GACCITTAAT
TTTTCGGGGA GAGCAGCTGA GGCCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG
TGGTCCANCA CGTTGTCGTT CAGTTGGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEO ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAAATTAA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT
CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGCTCCCA ATATTCTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTTG
CCAGGACTCA GAGAGATCAC CCATTTACAC ATTCAAACCA GTAGTTCCTA TTGCACATAT TAACATTACT TGCCCCTAGC

ACCCTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT
TGAAAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTTCTA AATACTGGAT TTCAGATCTG
G

SEO ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG
AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTTATCTC TTTCTCTACT
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEO ID NO:1944: (Length of Sequence = 406 Nucleotides)

GCCCAGGCTG TCTCAGAATC TTGATGGGT GGTCATTGAG CTCCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG GCCAGTGGCTA CAACTCGGAC CGCCTGCCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG AGCATTGGAG AGAACATCTT CCCTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCCCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT ATGGGTACGT GTGCATTGCT ATGGAGCATCA CCTCTTCGTG GAGAGCC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAAATTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGAA AATTGAGAAA AGACGCAGAG CCACTTTTTG TNATCGTGTA
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC
TCTGGCCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC
CGAAGTTCAG GAGACTGAGG ATGTAACTGG GGACATGATC ATTGNTTCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCICINAC CCCCAGGITC AAGCAGICCI CCCACCICAG CCTCCCGGGI AACIGITCIT TGTAACICIC TCATCATCGA
GGCIATATAT TAATAGACAT GGTATTAAGC CCACACGAAA CATTCAGAAT TAGAATTGGA TTAAGAAGAC GCGTITTGGC
ATCACGCIGA CTACTCCTCA TCTCCGTCCI CGGGGAGGGT GATGCCAGCG TGGGACTCIT TGGAAGGCCT ATCAATCACA
GGTGCGCTAA AATCAAAAGG TGGGTCAGTA GGTTAGGGAG GCWGGCGCGA AAGGAGATGC CAGCGGGTGI TAAGAAGGAT
ATGGTCAGAA GAGCTCTTG TCTCCATCCA CGGGGCCTCT GCTCAGCCCG TGTTGTCTCG GTGAGTAATT CGGGAGCAGT
GCACGGCT

SEO ID NO:1947: (Length of Sequence = 426 Nucleotides)

SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

SEO ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCATTCCTG ATTTTATCCC AGCTGTOGGG GATATTGATG CATTCTTAAA GGTCCCACGT CCTGATGGAA AGCCTGACAA
CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT
CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG
TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA
CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCACIAACIT TACGAATGAA AGAAAACAAT TCCATCCCIC TCACAAAAAG GACATCITIT AAGCITTCCI CCCAATCIAA CCTCCATGGG ATCTCAGAAA TTCCAATCIT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAACTC CCCGGGGACA GCAATCTGAG GCAAGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCACTGCCC CTGAGCCAAG CTGTGGCATG GCCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG TTCAGCCTTG AAACAGCAGT TNGGGAGTGT CTCAGCT

SEO ID NO:1951: (Length of Sequence = 336 Nucleotides)

CIATCTCCCC AAATCIACGI TICACCATTI GIACIGITAT TITTITAGCC CAAGCCACCI TIATGICACI CCIGGAACAT
AATAACIGCI TICTCACICA TCTCCIACAT TITINACCICI TATAATACAG TCCACCTIGI ACCGAGCAAC AAGAGITATC
TITCIGAAAT GCATATIAGA TCATGICACA TCTCIACTIG AAGCTCTCIA AAGATITCTC ACTAAAAGCG AAGTCTAAAA
TITCCACCCA GACCTATAAG GNCCITAAAT GATCITACCT CTCIACCTAC CTCINCGATC TTACCTATCT TCAACCTCGG
TICTATTITC TATATC

SEO ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGIATGIAA TITAATCAGC AAAIGCCCCA TITCCATCIC TACCGGAAAG CITTCAGACG CATTCCCAGA TCAGACAGAG
GACIAGGGIT AAGGCIGGGA ATGAAACACC AGCTAGIATC CCAGIGAGCI TICCCAAACA CACATACACA GCAAGICAGA
CIAAACAACG TCCAACTGAA GACTCACCTC AAATACITAG ACCIAAGATT CACGICCAGG CICITTCAGA TACACCAGGI
AAGIAAGCAC TIGGCATTCC TATCTCAGCC ATTCACITCA CAGAATCITT TGGGIGCCCIA CIGIGGCCC AATACTGIGC
TTAGIGGIAC TIGCCCTCAG CAGGAAAAAA AATTAAAAGT GITAAAIGIT ATGAAGGAAC AGATTGGNAT AGGAATCACA
AGGCATTCAG GIC

SEO ID NO:1953: (Length of Sequence = 382 Nucleotides)

GITTCACTCT TGITGCCCAG GCTAGAATGC AGTGGCGATC TTGGCTCACT GTAACCTCTG CCTCCGGGT TCAAGTGATT CTCCTGCCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTTTTGTA TTTTTAGTAG AGACAGGGTT TCGACATATT GGCCAGGCTG GTCTTGAACT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT GCTGGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTTGAGGAT TCCNTGAGAT AGTGTTTGAA AA

SEO ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GIGGIGCIGG GGAAATTIGI TCCIGITCCC TTTGGAAGGC TGAGIGGGIG ATGCAGCACA
GGAACAAGGC TTGGACGICA GAGGICTCAT CITCACIGIG ACAAAGCATA AAGGACTIGG GGITGAGCGI GIGINIGGGC
TCAAGIGACC ATGCAAGINC TGICACCICC TTCCTAAGAC CCCATCCTTC TCCCAAGICC TCCACAAGAG CTACCITCTT
CAAAACAATA ACAGAAACAC ATCAAGNI'IN GCGICACTGA AATTGAAGIT CTGAATTCTG CCGICACCCC AGCAACAGTG
CCAGITATGA TGAGACACTI GACCCAGCAC TIGGGITGAT GICTITGCCT GTTACCGIGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC CAGCTAATTT TTTINCTTT TGATTTTTGG TAGAGATAAG GTCCTACTAT GTTGCCCAGG CTGGTCTGAA ACTCCTGGCC TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAACTAG TTTTAATGAC CNAAAGAATT ATGTGTTCAC CNGTGATTTT ATGTGTTTTG TTAAGACATT CAGAATTTAG AGAAATG

SEO ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GGCGCGTTCC TCCCGCTGTC GATCTGGAC ATCTTCTCGC CAACAAAGAG
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGCCTTGT
TCCCGCCCGTA CGGTTTCCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAAA CGTGTCCATG
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGCG CCTNTAAAGC CACAATCACG
GCCACCACGT TGACGGTGAA GCTGGAACTT CAAGAATTTN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Mucleotides)

TGIGATGITI CITITITAGC CIGITGATGI GGIGAATIGI ACIGATIGAT ATTIGAATAT TAAACIGGCI TIGCATCCCI AGAATATACC TCACCAGGIC ACIGIGTACI AGGITGGIGC AAAAGIGCII GCCATTITGG ACCATGAATI TIGAATCATI AAAACIAGGC TCAAACACAT CIGIATTAAT CAAAGIAAGA ACCATTACAA TCAACACAAT TITGCCAACA AGAAATAAGI TIGITTACTC CIGIAGCATA AAAATCCGIG CITIGAGATI CGAGGAACTI TIGGNAAGCA CITICIGCAT CCIGCIGGIT GIGGAAGC

SEO ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATITAAGTTA AACAATTTC AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT CTGTACAGCA GTTCTTTTTA AAAATCAACT GGAAAAAAAA ATTACCAAAC TATATTTTGA ATTTGCAAAA CATACTCACA GATACCATCA TCTGAGCTTT TATGAGGACA TAAGAAAGGA CCACCACAGA GAAGACAACT AACTTCGGCA CGCTTTGCTC GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GIAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACITTCACA ATTAACACIC ATCAGIGIGA TAAACTAAGC CCATGIAAAA GIAAAAATCT CTCACAGITA ACAAACGICT TTACITTCAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGI CACITTGGAG GIGGCTGCAA AAGCTCACAA CATAGITGAT CCITAAAATA ATTATGAATG GCAACCAGIG CIGCCTTTCT GIACTCAACC ATGCAACIG

SEO ID NO:1960: (Length of Sequence = 329 Nucleotides)

GACTACAGGI GIGCCCCACG ATGCCIGGCI AATTITITAAG GITTITGIAG AGATGGGGIC TICCIATCII GCACAGACIG GIGIGGAATI CCIAGCICAA GCAATITICC IGICICAGCC TCACAAAGIG CIGGIATIAC COGIGIGAGC CACOGIGCIC AGCCCAGICA IGIATITCIA ATTATIGIAT ITGIGAACIA AICIATGAAC AACAAAAACA AACAAAACAAA CAAAAAGGGI GGCATITCIG GGCCACCAGG GAAGGIGGGA TIGGGGIIGC AGCTATITIC AAATTATATI AAAAGCAGGA TCCCAGITAG AGCGCTATC

SEO ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCCAC CTCAGCITCC CAAAGTGGTG AGATTACAGG NTCGAGCCAT CGCACCCGGC CCAATTATTC TITCTAAACC
ATTTCCTCTT CTGTGTTCAT GCCTTTAAAA ATAAAATTAA AAAAAAAAA AAAAAAAATC CTTAAAATTT CTCAGGTGTT
TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACTACA AAACATGCAT
ATTATAGGCT ACACTGAGGG ATTTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TECTEGIETC CCIECTETCA TCCTCAGGAG GCCAAATCAG TCCCAGCCTC TCCCACCATC TTCCCTGCAG CGATTTCTTC

GAGCTCGAAA CATCTCTGGC GTTGTTCTGG CTGACCACTC TGGTGCCTTC CATAACAAAT ATTACCAGAG TATTTACGAC

ACTGCTGAGA ACATTAATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTTGTAACAG ACACTGCCAA

GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTGCTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC

AGGCTGAT

SEO ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTTCTGGC TGCTTGTCGT
GAGAAGTGAT TTINAACCCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTTGTTA AAAGGCAAAT TTTCTGCTGG
GGACTGGCTT TACCCCGTCT ACCTAAATCA TTTCTTACTG CCTCCTGTAA CAGTCGCCTT TTGTGTTCTG CTGCNATTTG
TTTGAACACA GTCCACAGGT TCAGTGGTTN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TITTAATTCC AAGCAGAGTC CCCCTCCCCC AGCATGGTCA CACACAGT GGAAAGGGAT GTCAGGGTCT
GGGCAGGAGC AATACCCAGA CCTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG
GGGTGTAAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEO ID NO:1965: (Length of Sequence = 299 Nucleotides)

CECCETGEAT COCEAGAAGE CACAGCAGAT GOSCITICCAG GIGCATACCC ACCITICAAGT GAITGAGGAG AGGGTGAATC
AGAGCCIGGG CCIGCITGAC CAGAACCCCC ACCIGGCIÇA GGAGCIGCGG CCCCAAATCC AGGAACTCCI CCACTCIGAA
CACCIGGGIC CCAGIGAATT GGAAGCCCCT GCCCCIGGGG GCAGCAGCGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC
CAAGGATGCA GACACCCCCA TGACCCCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEO ID NO:1966: (Length of Sequence = 320 Nucleotides)

GICCCIGCAC ATGCGICIGG CAAGACGGGT CAGCITTGIG GICTGAAGCA GGAAAGITIG TCIGINCTIA GCCAGIAGCT
TGGCCCIGIT GGCGCIGGIT GIGTAAGGAG AGAGACTITG AGCITCAGGI CIGGATAAAT NACCCCITGA GIGTGGCICC
GIGGIGCCCC GAGIGGCCCC CICAAGCIGA GITGGGGICT TCAGICCCCC ATACITCITC CAGIAGATCC AACAGGAAGC
ACAGAGGCGG CACIGCATGI TAGGIGGGCC CCAGGCATAC CACIGAGCAG ACTGIGTGGI GIGGCAACTC TCACAAGICA

SEQ ID NO: 1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACTGGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT CCGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA GAGTTAAGAG TGAACACGT TTGATTTTAC TTGGAATTTC CTCTGTTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA CAACAACAAA ATAACATGTT TGCCTGTTAA GTTGTATAAA AGTAGGTGAT TCTGTA

SEO ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CICCCICCA CCAGCICIGC AGCCAGCCIA TGGCAATTAT ATTITAAGAG GIGITCCCAG GACTITIGGG
ACCTACIAAA ACAATGATGG TTATTITAGA TGIGATGATT TATATTIATG TAGAGATATT TCIGGACCAC TCAAGCTCIT
CGATACCAAA ATCAGGAGCA TCITGGGATT TATTAAATTA TGIAAGAAGA TAGCACGAT ATCGGGATAT TATTGIGIGA
AAATGCTGCT TITACTITGA TGIGATCICA TIGATGIACA CAACCAAGTI CCAATAAAGI GCTAGAATGI G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCCTGATAC ATGCAATATG GGTGAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA ACACAAGAGA ACATGTTGTT ATGATTTCAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA AATCAGTAAC TGCTGACAGG GGCAAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG ATCCNATTGG TGGTCACACA AGTGAA

SEO ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC
AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG
AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT
GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCCTC CTTGTCT

SEO ID NO:1971: (Length of Sequence = 263 Nucleotides)

GIGCATACTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT CATTTTGAAT ATAACTTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCCTCGGA AGCAAGCTTT CAATGTCCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TITACCTGAG AAGAAACCAG GAGGCITCIT CITCTTCTTC TCTCTCTTT TITTTTTTTT
TTTTTGACTA TACAGAAGAA AACTATCAGA GITAGGITAG AGAGTIGGGT TIGGGGTCAG GITGTAGCAT GIGTTATATT
ATGGGTTAAA TIGTGTCCTC CCCAAAATTA ATATGTTGAA GICTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA
AATAAGGTCA TIGCAATATA ATTAGGTAAA ATAAGGTCAT ACTAGAAGAG GGTAG

SEO ID NO:1973: (Length of Sequence = 243 Nucleotides)

SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GEATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC
TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTCGTGTAGC CTTCTCTGTG
GCACGCGCTG GGCAGAAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT
CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEO ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCTTGGA CCCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG
ACATCCACCT CCCCCAGCAC CCATGGGCCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA
CCGTTCTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEO ID NO:1976: (Length of Sequence = 162 Nucleotides)

SEO ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG
CATTAGGTGT TGTGTTGAGT GGCTTGTATT TCTTCTCTGC AGGGGGAGTG GCATCTCCTG GAGCAGCTAC GTTGCTCTGA
CGTTTGAGGG GGATGGGTTT AAGGTTGTAC TTGTCAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA
TGGTGTCTCC AGCTCTAGTC CAGTGGAACG

SEO ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAACG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA GTTAAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAAINC AGCCACGCCT GCCTCCACTG TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCATTTATTT GCACTGGAGG CAACTGTTCT TGAGAGAGGA
AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTTNACTA AATCAGTATG
AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTTG AACAAATCAA CAAATAAGCT TGAATAAAGG
MTCCACATCT CAATTCTCCT CCACCATTCT ATATTGCCCT TCATCCCTAC ATTAAAATGN TTATTTCTGC TTTTTTTCTT
TAACAATTTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAAACTGA CAGAGGAGA AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCATTCA
TTTATATTAT TTTTTTAAAA GGTTTCTTTA TCAGCTACTA AACATCTCAG CAATTTGGTG TGCATAGCTC TAGATTAAGC
AACAAAGAAT TGTA

SEO ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGGNICACTC ATAAGITTIC AGIGGITAAT TACTACAGIT TAAGAAGACG TGIGATTTAT TITITAGATCT GACCCAGCAG ATCATACCTN TNCNITGAAT TACATGGICT TCTTTIGGCT TCTAAGATGT CACACTCCIG TCTTAGIGGC CACIGCTCCT CAAGCCCCT TIGCTAGCTC TICCTCATCT GICCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TNTTCACCCC CINCCNGGGT GACCGTTATA CINCCAAACC TACAGG

SEO ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTTGTNTCC AGGAGCAGGC TITCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTNTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEO ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TITCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TITCGTCCTG CITCCCGTCA TCTCATATCT
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT
ATTCCCATTT TCTTGAGAAA TAAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT
AATTTTTATG TAAGTATACT GAATAAACAT ACA

SEO ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC CCTGTGCGAG TNCGGGGGCA GTGACTGGAA TGTNCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG TGCAGCGCAN CTCATGCGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

SEO ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTGCTT GGCCTACAGC AAGTNATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG CTGCAATTCT ATTGGTGGTT TTCCCCAAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA GGCCTGTCTA GATGTTTAGA TGTCTGGAAA TATATTT

SEO ID NO:1986: (Length of Sequence = 268 Nucleotides)

SEO ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCCTCACTG TAAACAAATG AGGATGGAGG ACACTGAGAG GNICAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC
GTCTACTCCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAAT ACTTAGTCCC
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEO ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGT TCGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTTC AGTGATTAAC TTGGATCCAT CCCATGCTGT CTTGAACTGT TCAGGAATGG GAAATTCTCT ATAATCACCA TCCTGAGGGA TAAGTATGTT CATTTCAGAT GACTTGGCGC TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

SEO ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCCA GGGCCCGGAC TCCTGGGTGT GGTCATGAGA AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEO ID NO:1990: (Length of Sequence = 223 Nucleotides)

CIGCTTCATT TACCACCACC AGCCGATGGA CCAGTITATT GGATTCACCT ATGATACCAG GACTITTCCA TICAATTCAA
TICAACAAAC TITTAGAGAT CGCCCCTATT CCAAGCTCAT CCAGGTTCTG CITCATGAAG GCAGGCTTTG GCATATCAGA
CATAAAAAGC TGGAGGAACT TGAGGATTCT TITGTGGGTA AGTATATAAA GTGCATTCCC ACT

SEO ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCCAGT TTCGTGTTCC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA

CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTCGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA

CCCACAAGAT CGCCGTCCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC

TACAGGTACA CGGAGTTCCT GACGGCCCTG GGCCGGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG.

AGGCCTTGAC GTNTGTNGTT AGGACGCCCA GTTCAACTAC TNCTNGCACG ATGACATCAT GGAAG

SEO ID NO:1992: (Length of Sequence = 312 Nucleotides)

GECTIACAGG ACAGAAAGGI CCCTICTCAC AGITIGGGAG GICCGAAGIC IGAAGIGAAG CIGICAGCAG GGCCACACCC CCICIGGAIG CICCAGGGGA GGGICCITIG CCICITCCAG TICIGGIGGC ICCAGGCAIT CCITGCITIA IGGIGGCAIC ATTCATCICI GCICCGICIT CACGIGGCCI ICICIGGIGT GICAAATCIC CITCICGIT CICIIGIAAA AACACTCGIC ATIGGGATIT AGGGICCACC CCAATCIAGA IGGICICCATC ITGAGCCITIT ACTITAGITA CCICIGCAAA GA

SEO ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGITTITAC TOGACGAGGA GAAGACCITT TCATGIGTAT GGACATACAG CTCGITGAAG CACTGIGIGG CITCCAGAAG CCAATATCTA CTCTTGACAA COGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGIC AAGCATGGAG ATATCAAGIG TGIACTAAAT GAAGGCATGC CAATTTAAC GTAAACTITC CTGAGAATGG CTTTCTCTCT CCTGATAAAC TGTCTTINCT GGAAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN ATGAGGTGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT GAAGGGTTGAT GGACCATCAT CCCAGAGGT

SEO ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGITGCC AAACCAGITG CCCCTGTCCT GIGICAGCCA GCIGIGGCAA TTTCACCCTT ATTCCTTGGA GAGGCCAGCT GCCTGCTGGA AGGACTCAGA AGTCCGTGGA TGTCATTGAG GCCTTGGAGG CCCCAGINIG GCGGGAGAGA AATCCACACC TGIGCCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC AGCAGIGCGT CCTCAATGTG CIGCCCCAGC CTGIGGGAAT CCGITTTTGT GCTTGATTTT TTGCTGGAGA TGIGGAAGGT GATCATGCCA TCCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEO ID NO:1995: (Length of Sequence = 341 Nucleotides)

GEACCTATAT GECCATECTC TESCTICTACC CTTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTTCA GGCCCTGGGA
TGCTGCATCT CCAGGCAACT ATGCACTTTC CCGGGGGAGA AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTCATCTT
TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCCGTCTGTC

CICGCCAGCC TCAGGCIGCT GCGCTCTCIC GGCTTTTACG GACCTCIGAG GCCGAAACCC CACCTCGAAG TITCCCCGTG
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TITGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGGCAGCC GCTGGCTCCA
GCTCACGAAA CAGCCCCGGG CGCCGCGCCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCCTCCCTTG TGCGGGTCGC
ACGCTAGCC GCAGGTTCGG CCACGTCAAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTCG TGGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGITTAT GITTITATIT ATGIATITTA ACIGACITAT TIGIGIATCC CACTAGAACA ATACATICAC AATATACITG CAGAACIGIG CCTGENGCAT CATGGGAGCA GAGAACITGI CCAGIGAATA GITGITGAAG AAAGGNGTAA AATCICCCCC AAACCCTAAA GGCATCCTIT TCGTAGTGIG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA AGAAGCAGAG TCAGGGAGCA AGACAGCAGG GITTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGNCTTCT

SEO ID NO:1998: (Length of Sequence = 395 Nucleotides)

TITGATGCTA TGGCGCTGGA CCCAGGGCCC TCCCAGGCCA TCTCTGTTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA
AAGGGAGTCA GGCGCATTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTTG CCAAGAAATT TTCCCTGTTT
GGAAAGTTTG CCCCAGCTTT CCCGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTCG ACCAATCTGC CTGCCACACA
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCCTT GAGGCCCTGG AAAGACCAAT
CACTGGACTT CTTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEO ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACACGCT GAATCAATCT TCATATAATG CCATTITTGC TTAAAAGAAT GCCAGACTTG
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA
AGTTCCTAGA TTTTAAGCAA AAATTTTAGA AAGCTTGTAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTTGA
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAAAATCAT ACATGGGTAA GAAATCTTTA
CAAAAGTGTCA GCTAGAC

SEO ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGIAGOCCO CTGCTGCAAA GGTGCCATCT TTTTNCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG
NNTCATCATG GGGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCCGT CACCAGGTTG GAGGGAAAGT
GCATGAGCAC GTTTGCCGGC CGTGGCCTCG GTGAAGCTGA CGTTAGCCGAA AAACCCCACC ATGACGTAGG AAGGTGGTGA
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTTT CACTTGACGG GCTCATCCAG GCTGTCGTAG GTGGGCAGCA
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCCAGGATT TCCCTCAGCA GGCATTTGTG CTGCCGCAGG GCCGTCTGGG TGCCCCGCAG GTCNTCCTGG ATGCTCTGTA GCCTGCGGTG GAACGACTCC CTCACTGACT GTGTGGCAAA GCTGAGCTCT GCCCTGACCC ATGTGGCATT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTGC CCGTNTCCTG AGGCACCGAC TGCCTCTCCT CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAACTC ACCATCCACT AGGACCTT SEO ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTTGTCC CTTCTCCACT GCCCCTCTT CCAGACAGTA AAGGCCATGG TCAGTGTGTT
TTTCTCTTGT AAACAAACCC CAGCTTGTTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC
CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA
GG

SEO ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TIATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGNAC ACTITTACAC INCTGGTGGG
NGTGTAAACT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA
GCAATCCCAC TACTGGGTAT CTACCCNNAA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACACG TTTATAGCAG
CACAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT
ATATATAT

SEO ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCITTITA TTATIGINIT TITITITITI TAANCGAAGG TCCCTTACIG GTCCTGCTTC CATGAGTAGC CGTGACCAGG GGAAAAGGGA GAGGAACCAG CCGCCACAGG GAGGGGTCAT CTCCACAACA TTCCATTTAT ACACAGAACT AAACAGACAA GCACAGAGTC ACTATIGCGG TTAGAAGTIG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

SEO ID NO: 2006: (Length of Sequence = 266 Nucleotides)

TICCCCCTAA CCITGIGAGI GGGCCITTIA AGIAGTAAGI AGIATACACC TAGATATGGA TAGATAGCTA GGIGACCAAA
CCTAATGGAT TAAGGCCATC CICGCCTAGG TCACITACTA AAGATCAGGI CATATGICAT ATCGITCCTG TGCITTITAG
AACGIATTIG GGAATGGGIT CCAGATTITI TITAAACACA TATTAAAGAT TATTIATATT ATGCITTGIT TCCGAAAGGI
TITAAGGIGG ATTAAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTTCTGC GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGCCCAGG
AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCCACGC CCACCTCAAG AGGGGGGCCG CCTCCTCAGG
AGGNATCAAG GTGCAATCCA GTCTTCCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC
TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGNTCTNTGG GCCCACATGG
AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG
GGACTCATGG AGGATTNGG

SEO ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAAATAATA CGCTCGTTCC TCTAATTAGC CCATCGGTT CAGGTTCATC ACTCTGCTAT CTTCTCCTGG
AGTTTACACA AGCCCTTCAG AGTGTAAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT
GTTTCAACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTTCTATAC GGTAAGCATT CTACCCTTCA

GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCAGTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACEGECA CCTECCACCA CECCTEGCTA GITTITGIAT TITTAGIAGA GACGATGITI CACCATGITG ACCAGECTEG TCTCGAACTC TIGACCTCAA GIGATCCACT CECTTCGCCC TCCCAAAGTG CIGGGATTAT AGGCGTGAGC ACCIGTGCCC ACCATGITGAC AAGGACTGGA GIGCCATTGG CIGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG CAACCAAAGG AGAGAATTAC GTACTTGTTG AGTACAAACT GCACCAAGGCC CTGGAGACCC ATTACCACCG TTAACCCTCA ATTACACCTCA ATTACACCTCA ATTACAGCTGT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGTACCT NTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTCAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCCTCG TGATACAACG T

SEO ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC
TGCAGCAATT CTTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGTNGC CCCAATATGAT GCCTACACGA GACAGATGTC
CCCAGTAGAG TGTGTTCAGT GACCTTCTAA AC

SEO ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGGTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCTGAGCATC CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGCG GTGGCGGCTG CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTCGAAG TCAAGAAGCC AGAAGATGAA GTCCTGATCT GCATCCAGCA GCGGCCAAAG CGGTCTACGC GCCGGAGGG CAAGGGTGAG AACCTGGACA TTGGCTTTGA CATCTACAAG GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO: 2013: (Length of Sequence = 213 Nucleotides)

GATTTIATEG AAAAAAATT CCATTTINNT TAAGAAATAA GEAGITTING TGICGAGGGC ATGACTACGA GAGGCTGGAA GCTTCCAACA GAGAATGCTG AACGANITCC CCCATGCCAT CGCCATGCAG CACGNCAACC AGCCCGATGA GACCATCTTC CAGGCAGAAG CTCAGIATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEO ID NO:2014: (Length of Sequence = 333 Nucleotides)

GITAAATAAA ACAGCAAATT CITAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CIGIGCAACT
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG
ATATTTTTGA TATTAAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTTCCAGTA TTTTTAACCA TTCAGATGTA
TTATGTGGGN ATATTTATTA ACATAATTIN GITTAACACA TTTCTTTCTA CACAAACTGA ATTTTAAAAG TGTCTATAAC
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

NCACCACTTA TIGICITCAA ACAITATIGC ACITTAACTI TCTTAATTIG ACAAAGCAIT CAAGAAACAI CIGCAGACTA
GITTIAACAG ACAAATAACA CCIGTAAGCA GACATGACIG TCCTAAATIG TITATTAAGA AAGITAAAGN GCAATAATGI
TIGAAGACAA TAAGIGGIG

SEO ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCCTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG
GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

COGRECTEG COCCOCCTEG GEOCOCCTCC TNTGCCENCCC CAGNCTCCTC GTOCCCCTCG ATATCTGTTC CAAAAACCCC
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACGTGCCT
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC
AGATCGCCCC CTCATCTGTG CGTGTGACCT TCTTNGGNTT GCAGCATTGG GTCCCGGAGC TGGCCCGCCT GAACCGCGCA
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGTGAAAT TNCTNCGGAG GGATNTGGGT
AACANNINTT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT
TGGNAGGATN CGNTTINTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA
CTAGCTGTGG AGGTCCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCCATTTT TTTCCTTCCT AAGACCCTGT
TATTTGTNTT ATTTCCTGCC TTTCCGAGTC CTGCAGTGGG CTGCCCTGTA CCCTGAACCT CATGAGCCTC TAAGGGAAAG
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCCAGN CTTACTGGGT
CCTTANCCTG GGCCAAACAG GGAGGGCTGA TACC

SEO ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACCACCT TITGAACIAT TECTECTETT TICATITTAA AAAGGAACIT TITAATACIAA AATTATAGGA AGAACATAAT
ATCIGACGIC ACGTAAATIC AGAITIGAAG GAAATTIACI TITTINCCIT ATTIGINCIT ATTITICCIC ATTITGITAA
GAACCAGCGA ACACTITGAA GAAAGCCAAA AGITTACATC TGGAGCTGGA GGGITCIGIG ACTGCACACC AGGCACTCIG
CCAGCCCTAC TICTGCCTGT AGICCTGCAG GTCACTTGCC AGAGGTGGTA CTITC

SEQ ID NO:2020: (Length of Sequence = 217 Mucleotides)

ATTGGAACIT AAGITTCACA AGGAAAGIGG TCACTITAGT TCACCACTIT CCTTGTGAAA CITAAGITCC AATGGGAGAA TGACAGTAAA CAGACAACTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGINAGATT TNCAAATCTG TAGAGAAACN TNGGCTCATT CAATAAAAAT TTTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEO ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AACGIGATCT TGGCTGTCTG TCATGIGTTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA
GGTTTAACAG TTTGTTGTCC TGGNGGGATT TTCTTACAGC GAAGACTTGA GTTCCTCCAA GTCCCAGAAC CCCAAGAATG
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

CCACGCGCT NGTAGTGCAG CCTTCTGTGA CCCCGCTNTG GTAAGTCCAG CCTTTCCAGG GCTGCTGAGG GCTGCCTCTT
GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCATTT GGTTGCCTGA TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO: 2023: (Length of Sequence = 294 Nucleotides)

TATTCTTAAG TITGCACTIT ACAAAACCAC AAGGGAGAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC CTCAGGCTAG CCCAGCAGGG TTCCTGTGTC CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO: 2024: (Length of Sequence = 234 Nucleotides)

ATTITIGICGE GGITGEAAAC GICTICCTGE CITGAGETGG GAGETTCACE AGGETTCGGT GTAGEGGACG TCCACTTCCT TCAAATTGGG AAGETTGGCE TTCAGATCIT CGTAGGTGTC AGCTGAGAGE TINGTGCTGT TCATGTTTAA ACTGCAGAGA CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTC AGCACCTGGA GCAT

SEO ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAT GITAAAGGI AAGATAATIT CCCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG
AAGGGAGAGA ATAAAATGCA ATAACGAGCC AGCATITACT ATGTATITNN TCCTCACCTG TCTCTCCATA TITAGGTCAC
TTACCAGTIT CIGIGCCCTT TIGGAGCTIT TNITGAGGGC TTCATTCTCA CCCTGTATIT CITTAGCCCT AAATTGACAC
TCTCTCCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAAGGGCT
AGTGTGG

SEQ ID NO: 2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TITAAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG CAGTTGAACA TGTTGTTGAG TTTATACCAT TCATTCATTC ATTTATTTTT NCTTTCTTTC TTTCAGAAAA TACTGGGTGT TTGATATTTG TTTCACTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT TACAATAATT ATTTGTTATT GTAAATTAAC AATTTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGTNCCN TTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTCAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCCTC GTGATAC

SEQ ID NO: 2028: (Length of Sequence = 272 Nucleotides)

ATCCATTICT GCATTAACCT AGAGTTAAAA AGGAATATIG TITATIGITT GGCTCTCCCC ACTAGAAGIT TCACAGGNGC ACAGATCATA TCTACCATTI GAACAGCTCT CIGCCIGATG GCTAATACAT TINITGGCAT ATAGTAGGTA GGIGCTCAAT

AAATTINITA CAGGAATAAA TGAGATAGGA TITTCAAGGG TATTINCIAT TAGGATITAA TAAAACAAAG TGATCITTAG AGAAACAAAT CTCCCCATCA ACATGCTATA CT

SEO ID NO:2029: (Length of Sequence = 261 Nucleotides)

SEO ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCACAG GCGTTTCTGA CCTGCTGGGC CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCCACGT AGGACAGGGT CACAAAGCCT GGGTTTGTTT CTGGGTACTT TGCGCCTCTG GGGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAAACTG CCAACTCTGG CCCTCAGAAC TCTCAGGTAT AGAAGCCCAA GATGTCTAAT ACCCTNTCCC AGTGCCCGAG AGCTGCCTGG TGTCAGGTAG AGAGGACACT GTACCTGGGT GAATGATCAG ACCCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG ACCTGGTAG

SEO ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCACAGAGG AGAAGCCACT GITGCCAGGA CAGACGCCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT
GGACCAGGGA CAGACTCACT CIGIGGAGAC ACCATACGGC TCINICACTT TCACTGTCIA TGGCACCCCC AAACCCCAAAC
GCCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG
CAGGAAATCA TTCAGAACTT T

SEO ID NO:2032: (Length of Sequence = 344 Nucleotides)

SEO ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAGA AAGAAAGAAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTCATCCA CCTTCGACTT CAACACATGT GACCAGAAAC
CTTCCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC
ATCTGGCCTT GGCAGCCTAT GGATTTNTGC CATTCTCCTG GCATGAAATC ACTCCTTCTT GTTGTTTTAA TTTGCATTTC
TTCAGTTACC AGCGCAGTTG AGCATCTTTT CATACACTTA CTGACCATTT CTA

SEO ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAAGA ACATCACGCT GICTTATGIC AAATGCICGA CAATACCICI CAGIAGGACG TIGITGCAAG GCIAGCIAAT
TITAAATCIG GIATGAGIAA TACAGICAAA CCIAGITAGI AIGCGAGAAA GICGITGCIA ACGCATGGIG AGAGGATGIG
ACGICACAGC AIGAGCAGIC CCIGGITGIC CCATTGICAG AIAAACGIAG INNAGIAGNI CCAAGITICI AITCCAGGIC
TCIGAACCCC AAAGCCAGGC CITICACITI TGCIGGGIGG CCIGGAAGC

SEO ID NO: 2035: (Length of Sequence = 290 Nucleotides)

CTITICCITC ATCTGAACAC AGAAGGAGCC ACGITCIGGA AAGINIGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG
AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC
GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT
GCACANTGGG CTGATGGCGC CATTTCCCCCA AATNGCCATC GGCACCAGCT

SEQ ID NO: 2036: (Length of Sequence = 241 Nucleotides)

TTATTITATA TAAAAAGIGI TICTIGIGATI CICCAGAGCC CAGGAGTCAG INCIGGIGGI TIGGAGGGACC TICCCCCCACT
GGITCATITA ACCCICIGIC TCGGIGCCCI NAGAACCICA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCICATA
CICTIGGIGA TCTATICATI CINIGACCIC AGGGICACA TATAAGGICA GIGITICICG TCCCCGNCGG ATCIGCACIG
C

SEO ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTT GCATTTTTGG TAGAAGGGT GGTCTCACCA TGTCGCCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT CCACCTGCCT CAGCCTCCCA AAGTGCTGCG ATTACAGGCT TGAGCCACTG CACCCTGCCC AACCTTGACT ACTTCTAATA GGGATGAGTC GAGTAGCAGT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCCGT CCATGGCTTG TTGTGCATCT GGCCCTGAGT GCCTTGGCCC

SEO ID NO:2038: (Length of Sequence = 151 Nucleotides)

SEO ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTTGTCTGTT ACAACCTCCG TATGACGCCA CGCCACCCGC TGTTCACGTC CCGTCGGCCT CCTGCACAGN CCACACGCTG CGCCCGGAAG GCCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC CCCTCC

SEO ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGIACGGI TAAAATTAGA TITGACCATA TGGAAGATCI TITTACCAGIT GGICTCCAAG AATGICITCC TIATTATGIT
ATTGGICATI TITGAGCGIG TGIGITGGIG GGGIGGITIC TGCCTTATAT TCCTTAACTA CATTGTATAT TTTTGTAAGG
AATTGGGAAT TCATTTTAAT GCITITTAAC ATCTTCACTG GGAACTGGAA TAAAGTTATT CTTGACTCTG TACCTTGAGC
CATTGTCAAA GTCAGGGGIT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCCTGGGTT AGGAAGCTGC
TGTTCAGGAG AAATTTTCCN GGTTCTTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

SEO ID NO:2042: (Length of Sequence = 403 Nucleotides)

GITATTGTTG TITGAGATGG AGITTCACTT TINTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT
CTGCCTCCCG GGCCCAAGCG ATTCTCCTCC CTCAGCCTCC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC
CAATTGTTGT ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC
CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG
TGATGGCCGG GTGTAGGGAC CCTCGCCTGT AATCCCAGCA CTTTGGGAGG CCAAGGAGGG AGGACCGCCC GNGACCAAGA
GTT

SEO ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCGIACGE TGIGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGIGTGAATC CCCCTGGACT GCGCCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCAGTCAGA TCTACATGCT GACCCTCATC ACCGAGTGGCA TGCGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTTCTT GCCTGGGCAA NTCTCTCCTC CTCAAGTACA CCGAGAAGCT TCAGGAGCCC C

SEO ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCCC AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA AGAG

SEQ ID NO: 2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGICCATTCT GCTCTTGGCC TCTCCTGAGG CCTCATAATG GGAGACCAAA TCAAAAATGT CCCATGTCAC
TTGAGTGGGT ACACTGCCTA CAGAACCTTG AGGTTGACTC CTGCTTCAGT TCTCAGGTGT TTACCACAGC CCTCCAGGGT
CCAAAGATTG AGGAGCTTTC TCTTTCCTGG GAGGAACTGT CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC
AGCGGTGGCT CTTGAGGAAT CCTCACCAGT TTGINCTCTT CCCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT
CATTAAACCA GGG

SEO ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGITTAT GITTITATT AIGIATINA ACTGACITAT ITGIGIATCC CACTAGAACA ATACATICAC AATATACITG CAGAACTGG CCIGGNGCAT CATGGGAGCA GAGAACTTGI CCAGIGAATA GITGITGAAG AAAGGAGTAA AATCTCCCCC AAACCCTAAA GGCATCCITT TOGIAGIGG TGICCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GITT

SEO ID NO: 2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTINTC CTGINITCGC TGCCCGGGAT GCGGAATCIT GAGCCTCGGT GTCGGGTTAC AGAGTTGTCC
TGGTGACGGG ATGCGGAGGT TTCCTCCTTT TTGTTGTGG GGCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTTGCCCA
CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTTCCTGGA TCCCTCTTGC GCCTCGTCCA TAAAGGCAGA CCCGCGGGCG
CGCCCGGCA ACCTGAAATC AGAGCAGGCG TCCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTTGC
TTCATTT

SEQ ID NO: 2048: (Length of Sequence = 241 Nucleotides)

ACTITIGITIGI TOTGATITTA GGACTOTGGO TGGCCATGIG CTINNEGITG COTOTCCIGO ATTINCCACT GGATITINCAC
TGCATCGITT GGAGATACAA AGCGAGCAGT TOTIGGTCAG AACCOTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT
GGGTCCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTTGTTTAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG
G

SEO ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTITIAGIA GAGACAGGET TICACCATGI TGGCCAGGCI GGICTCAAAC TCCTGGCCIC AAGTGAGCCA CCTGCITIGG CCICCCAAAG TGITGAGAIT ACAGGIGAGA TATICIATAI TCATGGAITG AAAGACICAA TATIGITAAG ATGICAGINC TITCIAAAGN GAITITITAG ATGCAACACA ATTCCAATCA AAATCCCAGG NITITITIGI AGCTATCAAT TGATAGATAT CAACAGCCAG CTGATTCICA AAITTACGI

SEO ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGIT TAATAAAGCT AAATGGGGAG AATTGAAGIT TGCATTTGAC ATGGTATTAA ACAAAACCAA AGGGCTGAAA CTCATGTTTA GACAACACAG GTCACTAGTC ACTAGGCAAA GAAAACAGTC CACAGCAGGT GGCACAAATA ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA TGCACAGGGA GAGAATTTNT CCCCGGATAC CCCTGAGGAC CAAGGACCAC CCCCAGGCTA GGGTGGGAGG ATTGAGAGCA GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO: 2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG
ACCCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGGACTGA GGAGGTGATC TTAGTGGAAT TATTTTATAC
TCACCTCCCC CGGGTTTAG TCCTTCCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT
CTTTG

SEO ID NO: 2053: (Length of Sequence = 222 Nucleotides)

TITCAAAATT AGICTTAAGA GIATAAGCIG TITTINAGGG CIGIAGCCAG ACTACATAAT GAGCGGIGAA AGCGGCIGCC TICCCCTCTC CIGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA GANGCCAACG GCAAAGGNCC CCGCGCGCTT GCTCGTGTTT AATCCAGGTT AAGCTATACA CG

SEQ ID NO: 2054: (Length of Sequence = 341 Nucleotides)

GIAAATTAAG AATATGGCCC CAGAGTITTG TITATCTGGG GICTGAGCAT AGATTITATA TICTCTGTTG CGTTTTTTAA
ATCTAACTIT CTGTCTCCAA TGGAGAGAGA ACAGGAGGA TACAGAAGTA TIGCAGCCCA GATCCCCTAT CAGGGGGACA
GCTGGTGGGC AAAGCAGCCA CCCCACAGCC TIGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCCTCT AGGGGTTCCA CAGGCCCCTG ACCGCACAGG
GAGGCTGGGG CCAGCCTGGT C

<u>SEO ID NO:2055:</u> (Length of Sequence = 258 Nucleotides)

CTGCCTCAGC CTCCCAAGTA GCTGGCATTA CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGACG
AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTTGTGATC CGCCTGCCTC GGCCTCCCAA AGTGTTGGGG
ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTTGCTTTTC TCTAATGGCT GGCGATGTTA ATTTTTTCAC TGGCTTATTT
ACCGTCTCCT TCTGTGGA

SEO ID NO: 2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT
CCTCTTTTC TCGAACTAAG AATAGACTAA AGIATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC
AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC
TTCCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCGA CGCAGGAAAC TG

SEO ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAACT TGGGIGCCIG AAGGIGGGGI TITIGATCATG GCCAGGCTIC AAATTIAGGI CAGGCICIGG TGGIACATCC
TTATATGCIT GGIGCTCAGC ACAGGICAAG ACACACAATA GACCCTCAAT AAATATTIGC TGAATTIGAA CAATTCCIGT
AAAAATCICA TTAAGAGACA TCAGCTTGGG ACACAGTICC TCICTTACIG TICCTTCICC CAGAAGCTCC TGGAATGAGC
AGGICTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEO ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTCGCCG GGCGACCCTG CTCCTGCCTC CCACATTAAT GGCGGCATCC TCGGAGGATG ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTCGCAG AGGCCAGGTT CTCCTTTAAC CTGGGGGCAG CT

SEO ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAAGT AGAAGGGGCC CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGTTCT CAGAACCAGG GCAAAAAAGGC CGNGGGAGCC CAGAACCAGG GCCAAAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA AGGCA

SEO ID NO:2060: (Length of Sequence = 318 Mucleotides)

ATGCCCTGIT AAGGAGCTIG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG
TCACACTCGC CATTTATGTA GATCGTTTTG GCAGCCAGGG GAAGGATGGA TTTNAGGGGG ATGAGATTAG AAAGCTGGGA
TATGAGTTAG GAGCCTGAAA GATCGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG
GACTTATAGC AGAGCCTGIT GAGTCTTGCT TTTGCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO: 2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCIATAAAC TACGGATCAT AAGCAACICC TGITTCTGTG GGITTCACCA CATTCTCCAG AAACTGAACT
TTTGCTCATA AAAATTACAT AGAATGIAAA CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG
AGCATCAACA CTGACAGAAT ATTAATTCTG AAGCCCATTA ACTTTGACAA ACGITTATTC ATCTTTGCCT TCTTGAAGCG
TGTGACTATC CCAGTTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA
ATTTCTAGCT C

SEQ ID NO: 2062: (Length of Sequence = 316 Nucleotides)

CTAAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AAACTAATGA GAAGAAAGAT ACAACGTATC AGAAACTCTG GGGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO: 2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTCG GAACTCTCCT AGCAACTTGT NTTCATCCAG TGATACTGGT TCINTGGGGG GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTTGGAGTG AGCCGTAGAT CCCCAGCCTC CACTGACAG CAGAACACCC AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCCTCG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEO ID NO: 2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCCTCAGAT GGGAGACCCA GCCAGTTTGG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAAACT GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCGAG CAGGCGCCC GCCAGAGCGG ACTGTACGAC AGCCAGAACC CACCCACAGT CAACAACTNC GNCCAGGACC GTGAGAGCCC AGATGGCAGT TACACAGAGG AGCAGAGTCA GGAGAGTNAG ATGAAGGTGC TGGCCACGGA TTTT

SEO ID NO: 2065: (Length of Sequence = 331 Nucleotides)

GAGCIGAGIT TCACCGIGIT GCCCAGGCIG GICICGAACI CCCGGICICA AGIGATOCIC CIACCTCAGC CICCCAAAGC ACTGGGATTA CAGGIGIAAA TCACIGIGCC CAACCIGCIC AAACICITGG AGAGAAGCAA GICITCTAGC TGAACGIGAT AATGGCCICA AAAGCAGTGT TGACAGCAGA TAATCITCAC ACAGACAAAT GICIACAGIT TCIAAATAAG CCAACTGIGC ATATGGCCIA CAGGCTCTIC AGCATAACCI ACCCAAAGCI CAGGITCCCI GAAGGCCAGG ACAGTACCIC GGGCCTTCAA GCAGCATTIG G

SEO ID NO: 2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CCTGACCTCA GGTGATCCAC CANCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC TGGCCTTGAA CCCTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTCG CAATTCAAAA AGATCCAAGA AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA GCCAGGTNTAA GCAGGTTTTA CCCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA T

SEO ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC
TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGTGG ACAACATCAC ACCCAGCTAA TTTTTNINAT
TTTTTGTAGA GACGGGGTTT CACCCTGTTG CCCAGGCTGG TCTCAAACTC CTGAGCTCAA GCAATCTGCC CACCTAAGCC
TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA
AAAAGCAGTG GGCTC

SEO ID NO: 2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGTA AAGAAGGAAT GGGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAAGC AGAGAGGCAG ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

CCACCIGGCC CGAGIGGAAG CIATGCIGAA IGACCGCCGI CGGAIGGCIC INGAGAACIA CCIGGCIGCC ITGCANIAIG ACCCGCCACG GGCINAICGN AITCINCAGG GCIT

SEQ ID NO: 2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTCA TAACCGCCTG
TGACAGCGAT GGGAAGGAGC CACACCCCTC CAGAGGGGTAC CACCCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG
AAGCCGGCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAAATA
AAAATGCCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGCG TTATCCCACA TTTTGAGCAA GGATAGAGAA GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAAACTTTGG G

SEO ID NO:2071: (Length of Sequence = 288 Nucleotides)

GIGGAAGGC CITCATACAT GCITCCCATC TICAGGAACA TCAGAGAATT CATACIGGG AGAAACCATT CAAATGGAT
ACATGIGGIA AGAACITCCG TCGIAGATCA GCACITAATA ATCATIGCAT GGICCACACA GGAGAGAAC CATACAAATG
TCAGGACIGI GGIAAGIGIT TCACITGIAG CICAAACCIT CGIATCCATC AAAGGGICCA CACAGGAGA AAACCITACA
AGIGIGAAGA ATGIGGIAAG TGCITTATTC AGCCITCACA ATTICAGG

SEO ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTTGTCTTC AGACCCCTTT GCCGTATTGT CCCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG
CAGTGAGGAG ACTTAAGCCA GGGTTCCTNC AAGNGATINC ACCGACCNTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTCG CGAAGGACCT GGCGTCTAGA GATGTGGTGT CTCGGTCCAT GACTCTGGAG ATCCGAGAAG
GAAGAGGCTG TGGCCCTGAG AAAGATCACG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGGGCCTG
CCTGGCATTT NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCACGAA GGAGCCGATC CCTGTCCTCC CCACCGTGCA
TTATAACATG GGCGGCATTC CCACCAACTA

SEO ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCCTGG CTAATTTTTG TATTTTTAGT AGAGACGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT CTCCTGACCT CAGCTGATCT GCCCACCTCG GCCTCCCAAA GTGCTGCGAT TATAGACAGG AGCCACCGACCCTC TCTCACTTCT CAAATCTCTT TCCTTTTTCC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAAACCAAG CTGACCGGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GICTCTAGGA TTCACTCAAA CCCAGGATCA CGGTTTTGTA ATGTTATCAA GGCATGATTT TGGATTTCAG AGCTGGCCCA GIGAACAACA AGCAATCAAG CATTCCTTTC TCTTTCTTTC TCTCTCTCAC ATATACACAC ACACTCTTTC TCTCTCACGT TACTITCACT GICACTITCT CICTACIGGA TAACAGGCCA AAAGTACIGG CACICATCIT TCACTITCTT CC

SEO ID NO:2076: (Length of Sequence = 223 Mucleotides)

GICACGAGGI CAGGAGATCA AGACCATCCT GGCTAACACA GIGAAACCTC ATCTCIGATC TATTCAGGGC TCINACITCT TCCIGGITTA GICTIGGGIG GGIGIATGIG TCCAGAAAIG TATIGATITC TTCTAGATIT CIAGITTATIT TGNGTAGAGG TGTTTATTCT CIGATGGIAG TITIGIATTIC TATGGGATCA ACGGIGATAT GCTCTTTATC ATT

SEO ID NO:2077: (Length of Sequence = 323 Nucleotides)

GICCCCCTTC CCCTCTTGIG AGACCAGGCT CTGICTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTC CTCCTTCCTT
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTIGCAGT TGITAAATCA AACCTACTGA CATITATAGT CCCTTACTIT CTCTTCTTTC TTCCATTGTA AATGICIGAA ATGICGTACA GTCATACTTC CCACTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA TAAAAGTTTT AAGTCAGIGC TGATTTTTTIG GTAGCTCCCA TTTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACACG

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCIGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGITAGI GGIGIGCAAA CITACITCCT TTAAATGICC CATGGATGTA GGACAGIGCC ATGITTCAAG ATGCCIGIGA GCTAGGICTI CAAGATTTAT AGAATGITAC TTATGAACAA AATATAATTA TTTATGGIAC AATTCITGIA CITTAGCAAA TCTGGAGITA GITCATAGIC AAAGICAGIT AATATTTCIT AGAGGAAAGI TTTGGCTITT TGTGGCAACA TTTTTATAGC T

SEQ ID NO: 2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAGA ATATTATTIA TIATCINCTI TATTAATACI CACATGIAAC CITTGCTTIT TACACAAAAG TCTGCTITAG
AAGAATGCCI CCNCGGCIIA TCATGCCCAA TGGGGCTITI TGTTTCTGGA CCACTTCCCC TTTCTCCACC CCCACCCCCA
CATCCAAATT ACTCTTAACA TGTTCACAGA TACCACGNAT ATTTTGTAAA CAAGNITTGG GTTACTGGAA CTTGATTTCA
TTAACATCCC ACTTCAAAAT GGAAGGCAGG TGGAGGCCAG GGTAAGGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO: 2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGINTCCCCA CCCCCACCTC CTCACCCCCT TTCCAGTTCT TCTTCAGGCC CCTCCCAGAC GCACCCCAGC GGCCCCTGCA GCCCCTGCCT CCAGCCTCCA GCCTCACCTT TGIGCCCAGA CTCGCATTTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAAGAAA GIGCATACIT ATITGCAAGG AAAACAAATG GAATAGACAA AAATTTTAGA ATATAAAGAC TTTTTINCAT
TTATGTATGT GITTACAATT CAAAATAATA AAGCTAGITA AAAGTCAATA CATATTAGAT ATATTCAAAT ATITINCCAA
ATAAATTTCG ATCTTATCAG TTAACACCCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT
ATTCTATTCA TTTGGGTTTA

SEO ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTITCATAT GITTATIAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA ACTAGCTGCT AGGCTCT

SEO ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA
CTTGTATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA
ACAATGATGA CATAAGGNCT AATACTCTAT TTATTCAGGN GACCCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA
AAGTGATCAC AGTTG

SEO ID NO:2085: (Length of Sequence = 290 Nucleotides)

GEACGCACGC TOGCTGCCAT CACOGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGTGTCCCCA CCCCCACCTC CTCACCCCCT TTCCAGTTCT TCTTCAGGCC CCTCCCAGAC GCACCCCAGC GGCCCTGCAC GCCCCTGCCT CCAGCCTCCA GCCTCACCTT TGTGCCCAGA CTCGCATTTG GAAGACTCCA CCTCCCGCCC AGGCCTGGGC TGTTGGGCGG TTGGAGATTC AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGITICATAT GITTATTAAA CCAAGCATGA GECCCITCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
GAGGCTGGGC GTGCCCGCCA GAGACCTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTTGAGGA
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCCGCAA TATCAATTTT CCCAACTCAG CCAAGATTTT
CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TITACAAGAA GCTGAACAAC
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCGGCCCT CTTGGTATAG GGTATGTATG TGTACATCTC CAATTTTGAA
CAATGATGAC ATAAGGNCTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTC AGAGTAATAA
AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACTT

SEO ID NO:2088: (Length of Sequence = 326 Nucleotides)

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT CGGCTCTCCT GATCATGGGA GCGGCGGGAG GCTCCCTCAT CGTCCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

GGGGCTATCA GCCATGGCT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCCGCGAAC TNCAGCGGCA CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEO ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACAGGC CCTGGTACAT GGCTGAACTC TTCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG
GAACCCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG
GTCATTGTGG TGACTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACACGCCAG AGCACCAGGG AGCTCATTTC
TGAGCTGTTC AATGACTGTG GAGCCCTTGA GTCTTCCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAT GGTCAAACAA TITAAGTCAA ATGTTTTAAT GGTGCAATTA AAATAAGGGT TCAAACATGT TTTCAATATA
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCACT ATTAGCTTTG TCCACACATG TAAGTTATCA
AAAGTTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA
GAGAGCCCCC AACCTTGTAA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC CTGGNAGGGT GGTTTGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCCTCCTGA GCTCCAGAAG GCTACGGAAG GAGAGCGAGG CAACATGGGG CTTCCCCCAG CGCTCCGTCT CCTCCTCCAC GTCCTCCTCA AACTTGATCC AGCGGGCCGT CTCCCCCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCIACACTG ATACAAGTGG ACCTAAAGAA ACGAGTTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGCACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC
CCC

SEQ ID NO: 2094: (Length of Sequence = 255 Nucleotides)

AAGGATGITT TGGITCCCIG CCTCAAGGCC GGCCATGIGG GAGITGIATC TGIGGAGTIC ATTGCCCCAG CCITGGAGGG
AACGIATACI TCCCATTGGC GTCTITCTCA CAAAGGCCAG CAATTIGGGC CTCGGGTCIG GIGCAGTATC ATAGIAGATC
CTTTCCCCTC CGAAGAGAGGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG
CAAGAGGAAA CTTTT

SEO ID NO: 2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAAACAAG AAAGAAACTIN CTGAAGTCGG GGGCTGCTAG
AGGATTITCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCCTCATTTC CCAGCTCACA GAGTCACCAG AGGGTGAGAA
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTTNTCCTC AATTACAAAG GGGTGCATTT CAGAGGAGGG
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

<u>SEQ ID NO:2096:</u> (Length of Sequence = 327 Nucleotides)

CIAGATATAA CTACCCITCI CIATICCICA CCIAAATCCI TATACTGCIG ATGACTITGG AAAATAGIAC AGGGTTITAC
AGTCIAATCA TGACAATACA TCICCAGGNI CCITGAGCCA AATACATICC TCAGAATACI TITTITAAAA AACTGAAATT
GATTACITGI ACTITGICAT CACCAAAAAAT ATCIGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT
ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTC TTCCACCTTA
AACATAT

SEO ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCUGUTE AGGICAATIT CGICACUGAT GCCICGGGIC ACATAGGCCC TGATGACCCA GATTICACAC AGAGGICAGT
ACATCGGICA ACTITCCICC CAGGAGGGGC CGGGGCIGGI GGGCCATGCC CACTCCGIGC CACATGCCTA GCATTCAGAG
CITTGIAAGG AAGCCCIGIT CIAAATGCIC AGGICCCACC CTICCTIGIC AAGAGAAGCC ATGGGCTICC TGCTCCIGIG
TCACAGIGIG CCACTIGAAG GGIGGCTCTT CCCCATTCTT CTTCCATGGG GGCCAG

SEO ID NO:2098: (Length of Sequence = 324 Nucleotides)

SEO ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCICA GIAAGGAGCI CITTATCITI ACCITCCCAC TCCAAACCIA CITGCIAGCI GITCITATCA TIGCCICCIT
TITCICIGIC ACAAAAATGI GITCCATCII AATGAACACA TITCATIAAT GICCTICITA ATGAAGGACA GICCCITITCC
CIGIGCIGIG AATCCCATAG TAATGACATI AGCITAAGII TICIGAGCAC TIGCITATCIG CCAGITCCIC CCATGAATTA
TCITGCITAA GCITTGCAGI ATACCIGIGA AATAGGIGGC AGIAGITGIC CCACCATAC

SEO ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCITAT TITGGATIGG TICACAATGI GGATCAAACA GGAAAATCIG TIATCATCAA CAAGACCAGC AGCACCAGAA
TMINCCGAGI CITCCAGCAG TICAGGCTCC TCAGGNICGC TIGICCCGCAC CCATCCACCT CITCCAGAGCA CACCCCTAGT
CICAGGIGIG GCAGCITGGCT CICCAGGCTG TIGIGCCTTAT CCAGAGAATG GAATAGGGGG CCAGGITGCT CCCAGCAGCA
CCAGCIACAT CCICCTICCA CITGAAGCTG CAACAGGCAT CCCGCCTGGG AAGCAATCCT TCITTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGIT TGATGCTACA CIGGATCATA GAGIGIGGGT TCTTTCTTAC ATGINITGGI AGATAAATGT CATAGACTGA TCCTGAACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTCAAA GGCAATCACC C

<u>SEQ ID NO:2102:</u> (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGIT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTTCTTAC ATGTGTTGGT AGATAAATGT CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

TGGTGCCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT

SEO ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTITCACTC CCCCGCCCTG GGCCTCTGCT CTCTTGCCTG GNTTCCTTCT TTTTTGAGGG AAAGAGGGTG GGGCTGCAGG CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CCITICACIC CCCGCCCIG GGCCICIGCT CTCITGCCIG GCTTCCTTCT TITTIGAGGG AAAGAGGGIG GGGCTGCAGG
CAGTCIACIG GCAGGACGG AGGCIGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCI AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCIG TAAGGTCACC TTCCTTNCTC TGGATGCTGG TTTCAACCAT CTATATATGG
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCCTACCC GCAGCTT

SEO ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAAACTACT ACTITGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT TGCCTCANAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTTCTCCC TTGTACTTTT TTTTGACCTG CNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEO ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAAACTACT ACTITGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT CAGCAAGGGG GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT TGCCTCAGAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTTCTCCC TTGTACTTTT TTTTGACCTG GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT GATGCAGAGC CTGCACTCTG GCACTCGCT

SEO ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GCNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TNTTCATGGG CCCGCCTGCC CTGTCCCTCC
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAATT NGGGAGCTAG AGAGAGCCCA
AGTGAACCCT GACTGTCCAC GCAAGTCCCA TGTCCTCCTC GTCCTGGAGT TCCTCGAGGT TCAGCGGAGCC CATCCCGCCT
AGGGCCTCT

SEO ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCITCCTGG TTAGAAGACC TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTNAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTACATGC CCCTGTGTTA GCTGTGAGGG ACAAGGCAGA G

SEO ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTACATGC CCCTGTGTTA
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTG
ATCTATTTT

SEO ID NO:2110: (Length of Sequence = 271 Nucleotides)

SEO ID NO:2111: (Length of Sequence = 315 Nucleotides)

GECTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCACGTNC NCCCAGGGCC ACCCTGCCCT GAGGTCCTTG TGTGGCCGCC CTGGCTTGGC AGCCTGCCC ACGCTGCCCC CGCAAACAAT GGTGTGTGCG TTTTTACAGC CCTTTTTAGG AACCCAATAT GGGCATAAAT GTAACACCTG TAGCGGGGC AGATTCTCTG TATGINCAGT TAACAAATTA TTTGTAATGT ATTTTTTAG AAATCTTAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTTTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG
GACACTCCTT TACCTCCCAT ATCCAATGTA TGTNTITCAC AGAAAAACAA CAAAATTAAC AAATTCACAA AATACAACAG
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGACT

SEO ID NO:2113: (Length of Sequence = 227 Nucleotides)

GCCCCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA CTCGCAGGGC AGGCCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEO ID NO:2114: (Length of Sequence = 339 Nucleotides)

GEGEGATCAG TEGEGEGTEC TETCAAAATT AGTGAAATCA GATACAGTTE ATGGGCAGGG AGGGTGGGGT AAGAGACAAC
TCCAGTGCAG TECCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA
AGGCCAGTTC GINGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG
GATGAGGTGG CCCCTCATG

SEO ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATTCCCTGT NITAACATTG TACATTCGGG GCCTAGCTGC CCTTGAGGAT GTCCTAGTTA CACCCTGTCT GATACCTGTG GAGTTTAAGC ACCATTCCTA CCGCTGTGTC CCTTNGGAGG GGGTGCAGTG GAAGCTCTTA AAGGGGAATG CTTGCTCTGC CTCTGTGGCT TTTTGTTTGG GAAAGGGAGT TNGGATTNGA GGATTTAGAT TTNAGGTCAT GATGTCAGAG CACACCAGGA ACTCCCAAGG CT

SEO ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTCGT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEO ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCINCA AGGNICGATC CACCCTINCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTCGCTGC TCTCGATCIN CCGCTGGCCA ATGTAAAACC
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCCACCAC GCCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

SEO ID NO:2120: (Length of Sequence = 237 Nucleotides)

COGCTCTCCT GACGGGGGCC CACTAGGGGG TCCTCTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG CTTACTCTTC TCTCTCTGGG ACCAGCATGA CCCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGCCTGGAG GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GOGSTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACTN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC CTNATGTCCT AGACACATGG TTTTINTTCTG CCCTGTTCCC CTTTTINTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT GCTCGTTTCT ACCCCCTGIN ANTITTGGAA ACGGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEO ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGGA GAATCCCCTA
AGCTCCAGGG CCCAGGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGGAAGAGGA
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GITCTCTTGA TGTGTAGGGA AATTTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT
AACTGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTTG AACCTCAGAT TTCTCAGGGC TTGGCACATA GCAAGCATTT
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTTGTGG GGGGAGGTTT GTTTGTTTTG TTTGGAGACA GGATCTGGCT

TTGTTGCCCT GGCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCNT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEO ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC
TGCTGACGGC ATGGGTCGTG CTTCAGGGTG GCAATACCTC TTAGGAACTT AGGGCAGGAA GCAATACTTC AGCATTGAAT
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTTNCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TIGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCCT CCCCCAGGC ACTGACACAT TGAAAGGAAG CAGAGCAACA ATGACACAG ACGGATGTGG GAAAGGGGAT CCCCCACGGG GGCAGGATGG TCCATCTCAC CGGGGTCTCA CCAGGACTCC CCGCTCCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTTC TCCCCAGTGC AGAGCGTGGG GTGACAGGAG T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTACTTCATA AGGAGTTGTA TCTTCCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA GTAGAAGGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTCACCCTT GCTGTGCATG TATCAATCCT TATCCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTTAGAGGAT TAAGGAAACC ATAGAGTTTG GGCCTTGGAA CTGTTACTGC CTTGT

SEO ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCITA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGIATGIGIA CAACACAGAC ACTGATAACT GICGAGAAGI
GATTATTACA CCAAATTCIG CATGGGGIGG AGAAGGCAC CTAGGATGIG GCATTGGATA TGGITATTIG CATCGAATAC
CTACACGCCC ATTTGAGGAA GGAAAGAAAA TTINICITCC AGGACAAATG GCTGGIACAC CTATTACACC TCITAAAGAT
GGGITTACAG AGGICCAGCT GICCICAGIT AATCCCCCGT CTITGICACC ACCAGG

SEO ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGITTGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGITTCAGA ATCTGTGAAC
AATTCCATTT TTCATCAGAT AGCAGAACAA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCITTGGGT CAGAGCATTC AGCGTCACCA TCACAAGGGA
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTCAG CAACAGGATA TGGATATAGG
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TITAGIGGGT CIGGGGTGGG CGCGGCCCCC GGCTAACGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT CCAGGCCTCC CCGCCTAGGT GGAGCGTGAC ACCGCAAAGC ACACGGTCCT ACCGAGGCG GCCCCAGGCC GCACCAGCCC CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGA GGGAACCTGG ACAGGGGGCG GCAGGCGGGG TGGGNGGCTG GCACTCAGGC GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTTGA GGAGAAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCCAGC GGGGTAAGGA GGGTGGGGGA AAACTGGGTC T SEO ID NO:2131: (Length of Sequence = 280 Mucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GITCTTGTGG ATGGTGTTGC
GGTCGGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCCACCC
AGGTGATGAC CGACAGCAGC AGCTCGTTGA TGCGGCCCTG GTAGATCTCA CGGTGAGCCA TGAGCACAGC GAAGTTGGTG
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTTGGACT

SEO ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATTGCCTGC TCCTCCCATG GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAACTC AGTTTCCCCA GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCCTCC T

SEO ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT TGTGTTCACA GAGACTTTAA GGAACATGAC TGTTGGGAAT AACAAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT TGTAATATTA TACCCATACT

SEQ_ID_NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGGTG GCTTCACAGC TGTTGGAGCA CCCAGAGAAC
CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAACT TT

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT ATATCCTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGTCTTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC CCGGGACCAA CTCCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEO ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCT TTGTTGTCAT GGTTGATTTT GTACATTTCA GCATTTGCAT CATACAAAGG GGGGAGCAAC AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCCAGG CACTGACACA TTGAAAGGAA GCAGGACAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGGTCTC ACCAGGACTC CCCGCTCCCA CCCAGGGCCA GCACGAGCAC CT

SEO ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCITAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTCAGCTA
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA
AAGAAATCAC AAATAACCTT CTTCTGTTTG AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGTNAAGG GAACTTTAAT
TCACTACTGT AATTTTAAA TGTCTGTATC ATGTAGTGTT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA

SEO ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCCGA TGTTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC
AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA
CAACCAGGTC CAAGAGCGAG TTTNCCCCGA GGCGGTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGCGTAC
AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCCTCA GGACCTGCCC CTTGTAGTTG GTGGG

SEO ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACTCCCA AATGAAACAC TCAACCCAAG GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT AGGGGCCCATT GGCAATGCTC AGA

SEO ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGCGCCCCT CAGCTGTGGC TTCCCGGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG
TGCTGGGGGA CTCAAAGACC CAGAGGTTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC
CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA
AGGGGTGACT GGATG

SEO ID NO:2141: (Length of Sequence = 355 Nucleotides)

TITAATTAAA TACCACTTCA TAATGTTATT TGCACCTAGT ACTITITITI TITTAAATAA GACATGCCAT AAGTOGTGAA GTTAACAAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT AACCTTTTGT CTGCCTATCA GCCAGTGTTG AAACAGCTTT GGAATTCACA TGGAAGGCTG CCGGGCTGGT TCCCCAACAC TMGCCTGATG GAGTCCTGTA TCCGAACACT GCCGTCAAAC TGGCTGGTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT CCCTTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEO ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTCGA
CCTGCCCTTC TTTGCTGAGG CCTTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG
TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA
TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCATC CTTGAGCCCA TCTCAGATTT GTGTGGATAG
GGTGTTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTTGTAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCITCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA CACGCTGGTC TGAGATGAGG GGGAGCCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACCTCA GGTCAGCCAG CCTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCCC AGGTCGCCAGG TNINTGAGGC CAGCCAACCT GCAGAGCACT CGCGGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG AGACTG

SEO ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCGGG GTGATGTACA GCAGCGTCAN AGCACCCCCA GGAACTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

CACGGGGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC ACACTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA
TGGTGTTGAC AACTTCTGTC GTGTTCCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCACTGCAG
TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

SEO ID NO:2145: (Length of Sequence = 420 Nucleotides)

CCCCAGGACC TECTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCTG GTGCTAGAGG AGGATGGAAC
TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGIT GCAGTCTGGT CAGAGCTGGA
GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCCC AAGCACAGCA AGGACATCGC CCGATTCAAC
TTTGACGTGT ACAAGCAAAA CCCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT
GAGTTGTGAC TTTCAAGGAC TTTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGG
CCTGGGCCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTTCCCAAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT
CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA
ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC
ACGGAGGCCC CGCTCAACCC GAGTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT
GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTTAGACTCA

SEO ID NO:2147: (Length of Sequence = 219 Nucleotides)

TITGIGGITG GAGAGAAACT GGIGITCIGC CCGGCTCIGC TIGGICACAG ACAGCTCCAG CAAGAGCAGI TGITAAAAGI GCCAAGCGIG TGIATCACIG TGACAAGCCG TTTGCTTACT GCCCTGTTCC CTTNCAGCCA AACCAGCTGA TGAAGAACTG CTGCCAGGNG GGTCCTACAG CAGGTCACAA ATGACCTAGI TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTITA TIACAAAAAT ATTTIGCAAG CCAAAAAGTI TAAGTIGCAA CTATATACAA AATGGGGCCT GITTCCTITCC
CAGCAGTCTI AAAATAAACT CCTGAAACCA TGCTCCTTCC GCAGGTIGGT TCGACCTCTT CCTTTTCCTG GGGTTCAATA
CACAAGGTAT GIGGATTCTC CAGGTIGCCA GGCTAAAGCT AAAGCTATAC ATCTTCCTTG GCCTTATTCC CTTATTTCCC
CCTCCAAGAA TTAAAAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA
TGCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

<u>SEO ID NO:2150:</u> (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG SEO ID NO:2151: (Length of Sequence = 369 Nucleotides)

GIGGGCCCCA GICTITCIGA AACCIGINAT CACACITOGG GCACIGICCC CICTACAGIC AATCIGIGIT TICAGAAGIG
GCCCCAGGIT CACTCGICTI ACAGCAGICC TAAAGAGCCG GCIGCCCTIT CCCTAGGCIT CCTTGCTCTIT NAGGGCTAAA
TICCAGCCCT CCTACCCCAG TGCCACITGG GIAAAAATAC TCIGCTCCTC TCACGITTGC TAATAAGCCC GGGCTCCGAC
TACCACCGIT CCGGGGAAGG GAGCCCCTTA CCGICATTGC TGGGTCCGCT CCGGGAAAAC ATGTGCCGGA CCTGACTTGT
GCGGCGCGCAT CTTTCCGGAA ATGCCGTTT TGTTTCCTTC TAAGGGTGT

SEO ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCACAAACA AATTGTGGGA GAAACACACC TTCCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCCT GCAACCATCT CTCCCCATG CTGGCCCTTG GGTCAGGATT TGAGGCACTG TTCCGAGGGA GCCCTCAGGG CCACCTGAGC TGCGAGAAGG GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCCTGCCCTT CCCTMTTGGC TCCAGGAGTG CACTGCCTGA CTCCACTGGC AGGTTGATCT GGGAACGGCC TMGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEO ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCCA GAATGTAAAT NAGGCCAAAA TGGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT
GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCCCAGG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG
GACCCGCAAG ATTAATAACT TGAATGTTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGGG CCCCACTGGC TTGCAGGGAC
CTGGNGGTCT GCACCAGTTC CAGTGACCAC TTCAGAACCC ACCTNGGNGC ACCCCCCAAT GTGCTCTGGC AGACGGCATT
GGCTT

SEO ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTT AAATGAAACA CAGITITCIT CATGIGICIC ACICAGGCIT CAGGGCAGAG GGAATGGATT
TITAGACATA TCAAAGACTC AAAAATTTAA AGAAATATAT ATATGITATA ATATACITCT AACATTTIAT GGAAATTAAA
AATCAGAGGC TITITGGTCTC TCCATTTACT CTAGGICAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTTCTA
GACCCTCCCT TCTCCTTTGT CCTNTGTCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGITTCCA
GTAAAT

SEO ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCCTGAAC ACACCCTGCT ACTGNCAGCT GGAGCCCAGG GCCTGINACA TCCTGCTGGA CCAGCTGGGC ACCTACGTTT TCACGGGGGA GTCCTATTCC CGCTCAGCAG TCAAGCGGCT CCAGCTGGCC GINITCGCCC CCGCCCTCTG CACCTCCCTG GAGTACAGCC TCCGGGTCTA CTGCCTGGAG GACACGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC GGACTCTGGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEO ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTICCAGCTG GCAGCCCAGT GGCCCACCCA TGTCAAGCAC TITCCAGTGG GACTCITCAG TGGCAGCAAG GCCACCTGAG
GCCCTGINTC CCAGCCACT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGGGGGA TCTCGGCTCA CTGCAGCCTC
TGCCTCCCGG GTTCAAGCAA TINTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GCGTGCCGCC ATGCCCAGCT
AATTITTGTA TTTTTAGTAG AGACAGGATT TAACTATGTT GGCCAGGCTG GTCTTGATTT CCTGACCTCG TGATCCGTNC
TCCTCAGGCT TCCAAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEO ID NO:2157: (Length of Sequence = 351 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCCINCACAT CCCTGATTCC TGTTGTTATG GAAACTNITG CCAGAGATGG
AGGTTCTCTC GGAGTATCTG GGAACTGTGC C

SEO ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGGAATCAGA GCTCAGCCAG

GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAACTCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA

CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG

GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

SEO ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTIGIGCGIT TCTCCTACCA GATTGTGCAT GCCTCCTGTG GGCAGAGCCT GTNCTGACIT GCTCCTGGGT CTCCAGCATC

ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCCACACT GTCAGAATTG AGATGAAGGA AGCCCAGAGA

AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCCTGGGTG CCCAAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG

AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC

TGGGCACCAG GGGTGATGCA GT

SEO ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCITCCITCG GITTCAACIG GACITCIATC AGGICTACIT CCIGGCCCIG GCAGCIGATI GGCITCAGGC CCCCTACCIC

TATAAACICT ACCAGCATTA CTACITCCIG GAAGGICAAA TIGCCATCCI CIAIGICIGT GGCCTIGCCI CTACAGTCCI

CTITGGCCIA GIGGCCICCI CCCITGIGGA TIGGCIGGGI CGCAAGAATI CTIGIGICCI CIICICCCIG ACITACICAC

TATGCIGCIT AACCAAACIC TCTCAAGACI ACITTGIGCI GCIAGIGGGG CGAGCACIIG GIGGGCIGIC CACAGCCIGG

CICITCICAG CCITCGAGGN CIGGIATATC CATGAGCACG TGGAACGGC ATGACITTCC CIGCIGAGIG GATCCCAGCT

AACC

SEO ID NO:2162: (Length of Sequence = 339 Nucleotides)

CACTGCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAAGCA

ACTTGGCATT TACTAAACTT AGGCTAACCA AAACCCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC

CAGAGGACCC ACCACTGGGG TATGTTTTAG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG

TATGGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTTG GCCTAAACAT GGTTCTATAT GTTATAATGA

TACTTTACAA TTAGACTTC

SEO ID NO:2163: (Length of Sequence = 285 Nucleotides)

CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTGCAAA CCCAAAAAGG CTGTGCATTT
GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG
TATAAAGGGA CAAACGGTTG CATTCACCCT TTGTACTATA ACACCGCTTC TGCATTCGCC ATATCCGTTT TTTAACCTTT
TTGTCTCCGG GGAACTTCTC ATTCGATTAT NATGTCTTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGITTGIAA ATCACTTCCT TTTCCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCCTCGGACC CGGGCCAGGGG TCAGCAAGAC TCCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTCGCCA TCCCTGAGGG GTGCAGGACA GAGCCCCATA GGGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC TAGGAGGAGA GGTGGGGCTCT GGCAGCGGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEO ID NO:2165: (Length of Sequence = 310 Nucleotides)

GITTITIGIA TGITTITCAA ATAATGITIT TCTGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNICTCAT TCCCATTGCC CAGGGTGGAG TGCAGTGGTG CGATCTCAGC TCACTGCAGC CTTGACTTCC CAGGTTCAGA TGATTCTNCC ATCTCAGCCT CCCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTTA GCAGAGACGG GGTTTTGCCA TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAAGAGAT CCGCCTGCCT TGGCCTCCCA AAGTGTTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAAACT GGAAAAAAA TAATTGTAA GCAACAATT TAGATTTTT TATGGAGGAT AGAGACATT GAATCAGATA
CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG
AACAACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGTCAG TACTAACACA GGTGGAAGTG
GGATTGTGGC GGAGGGAGA GGTAGTNAGG GTAGACTTAT TTGTACCATT TTNATTTTTG ATATTTCTTT TATATACAGA
TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCCT T

SEO ID NO:2167: (Length of Sequence = 325 Nucleotides)

TOCIGGGCIG TGCICIGITT GAAGGGGGG CCCTGCICCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC CTCTGGGTGA TGGCCICTTC CTCCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCCGAGCCCC AGGCAGCGGT GATTCAGCCC TGCCCAAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC CCAGGGGTCCA GGGAGGGGCG CCTGCTGAGC CTCACCCTGN CCAGCCCCTG CCATGAGCTC TGGGCTGGGT CTCCG

SEO ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACOGT TOGOGGAGGA AAGGOGAACT AGTGTTGGGA TGGCCACCAA CTGGGGGAGC CTCTTGCAGG ATAAACAGCA
GCTAGAGGAG CTGGCACGGC AGGCCGTGGA COGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT
CCTCGGAGGT GGTGAGCTAT GCCCCATTCA CGCTCTTCCC CTCACTGGTC CCCAGTGCCC TGCTGGAGCA AGCCTATGCT
GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTCAGCC AGAACNENTG CCTTCCTGGA GCAAANTCTT TINCAGCACC
ATCAAACAGG ATGACTTTTA CCGCTCGT

SEO ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTIGITGA GETCCAGTIT GEGIGGCAGA AACTAAGACA CIGAGCIGAT GAGAGAACIT GITGCTITIC GCCCIGCGCA
TITATTIATT TATTTATITA TITATTITIG TATTTITAGI AGAGACAGAG TITCACCATG TIGGCCAGGC TIGGCCAAA
CICCIGACCI CAAATGAICC ACCCACCICG GCCTCCCAAA GIGCIGGGAT TACAAGIGIG AGCCACCATG CCCGGCCACC

TGTTGCATCT TTAACAGCTG TGTTTGGAAA AGGGTGAGGA ATTGATTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG AATGCAGCCA ATTGGTTTAA TTGATCAAGG CITATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEO ID NO:2170: (Length of Sequence = 273 Nucleotides)

GITGITGITG ATGCTGITGI TGITGCTTTC TGITTGITTT TCITGCAATG GTCAGGICCC ACTCTGAACT CCGGGGGGCA
CCAACCTGAT GCCAGTAGGA TIGCCCTTGI ATAGGGTGTC TGACAACCCC TGITGAGGGI CTCACCCTGI TGGGTGGCAC
ATGGAATAGG ACCCATTTAA TGAAGCACTT TNTCCCTTGG TGGAGGIAGI GTGCTTNCT GGGGAAAAAC CCACTTGICT
GGGCTGCCTG GATTCCTCAG AACTACCAGG AGG

SEO ID NO:2171: (Length of Sequence = 357 Nucleotides)

GIGATGIACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG
CAACACTAGT AAAAATTTAC TACTITGATA GGTGCACATC TTCCTTTGGT CAGCAATTIT CTCAAAACCA CTGTAACATT
TTACTAAAAAT GCTAAGCTTT GATGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCACTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT
GAACACACAC

SEO ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG
CAAAGTGGCC AGCTCCCATG CCTTTGCATG CATTINTCTT TACCTCCTGC TGCCTGGGAA CATCCTTCCA GGAGCAATCG
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAACTAT CCAGGAGTAG TGTCAAACAC
TAACACCATA TTTACAAGTC TAATTTGGAA CCTGGGCCCT TTTTAAGTGC AGGAGGAAGT T

SEO ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCCTGA AGGAGCTCGT GGTCCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG
TACAGCAACG AGAACCTGGA CCTNGCGCGG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA
ACGCATCCTG GAGTTCATTG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCCT
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEO ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG CTCGGTGGCT CCACTGCCAG GTCCGGGGCG GCTCCCCACA GCGCTCAGTT CTGGCCCAGA CAGGGCGTGA CATCCGCCGC CTGCAGTCCC GGGGTGGCCG TCACCGTTCC ACGGCCAGNG ACTCTNCCTG CTCGTCCGGG AAGGCGATGT CGAAGATCTC CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCGT AGAAGTCC

SEO ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCCTGCC ACCTCCATCC AGACCTGGAG CAATCCCTGA GAAGGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT GTCCCAGGCA ACCAAACAGC CATTCATCAG TAAGGAGCCA GAGTNAGGGC TGCTAGTTCA GCCCCCGGAA GGTGGTCCAG GGGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TTCACTCCAG TGTCCACAAG GGACATCCTG

ACCIGGAGGI CCICGGCIAC TCACCCIGGG GCCINCITGC ACAGCCCAGG AGCIAGCCCA GGGCIGCCIC TAAATGGITC

SEO ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT
AATAGTGTTT TAGGAAGACA AGATAAAAAAT TACTCAAGGC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGCTTC
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCACTGATTT CCGAACCATT TGTTCCTGTT CCTTGGCTTC
CGTTGTGAAT GACAGGTTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACTCA

SEO ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGITITIATA AAAATCAGAA TITITCAAAT GCATTGGICA TITICAGAIG CATTGGICAC ATITCATTAT TCCATATCAA
AAAACTGCAT TIGITAATGI CACACAAATC TCATTGGAAA GGICTICAAG TATTGIGAAG TIGICCAGGI CACAAAGAIG
AATGCIAGII TITCAAAATT CIACITTITA CITGAATGCI CAAATCTIAI AATTGGIAAC CCCGICAGII TITCITTAGI
TGATAGGCII ACTGCITTIA TGIGITGAGA ATACTIGICI GTGAAACATC CAAATCTGGA AG

SEO ID NO:2178: (Length of Sequence = 343 Mucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT
CAATTCTCCT GCCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NIAGGTTTT TTTTTGTAGA
GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCTCCAACTC CTGAGCTCAA GINATCTGCC TGANGTGCTG GGATTATAGG
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTTCCT
TGTGGTATAT ATTCTATAGG CTA

SEO ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CICATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TICACAGTAG GGITCATGCT CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGIAATGCT CACTCACCTG CTGCTCACCTC CTTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGGA CCCCTGCAGG AAGTCTTGTA AATGCATGTC AGGAAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAAACTAG GACAATTCAA ATATTCATCA MGGGAAAACC TGGGATAAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTIGCT TITCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCCTTA AAACACCTGG GCTCCTTAAG CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGGRGA GGGGTCCCCCA GCCAAGCTCT GGNCAGGCCT GCCATGGGGC AGNGCCTGAC CGINCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG
AAGGAGTTGC TGCCAGCACA GGGTGGGCCT GGACTCCCCT CGCCCCTACC CCCAGTGGTT GTGGCTGTAG CCCTAAGCCT
GGAGAGCAGG ACCGGCCCGG GGTGTNTNGN AGGCTGCCAG GTGCCTCCCA GAGCTCCCAA GGGCCCCCAC CTGCAAGTNC
CAGC

SEO ID NO:2182: (Length of Sequence = 287 Nucleotides)

CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTCAGC CAGTCTCAAC ACAAAACACC CAACAGGGAT GCACTCAACT TGTTGGTTCC ATGTGGAACT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCTG CATTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEO ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAAGT
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTTTTATAA ATAATAGATA
TTATAGGTAT ATTTCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC
AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGCGGATA TTCTGTGTTG ATGTTATTCT ATAGCCATAA
ACTTCCCTGA ATTTCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEO ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAA CGGITTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA
TGAATATAAG TCAAACCCCT CTGCCGTTGC TGGTAATGAA ACTCCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTTG
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAAGAG
AGCAGTGAGG AGCAAGATAA TGCTCCCAAA TCAATCCTGG GGCAAAGTCA AAATATTTGA GGAAGATGGN TCCACAAGGC
CAGGTTACAG AGGAATGCAA GGAACTTCCA GGGAAGCACA GAATTCCAAG TTTTCCGAAA TTT

SEO ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTITAATICA CATCACAGCA GICAAGGAAG IGGGGAAAGG GGAAAAAAT CAAGIGGCAG ATATITACAT CIAAAATICA
CATTACTIGI IGGATITIGA ACAIGCIACC ACAATATATA CAGTAAAATA CCICITGGGA CAATGGIACA AATITIGIIT
CCITTAACII IGCITITCIG GIACAGGIAA GAICATITIT AAATCACIIT ITINCITTAA ACAIGAATAC ACAAAAGAAA
IGGIIAGAAG ITICCIIGII ITAAATAAGC ACAGAATGCG GGAGGIIAAA AACACATITA IAGIGCIGAA IACCAATIGG
NCATCACACT CIATACATIT ITIGCICAAA ITCCIGIAC

SEO ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTIATAC TCAGTGAAAT TAACAAGACC CAAAGGIGGT ATIGTCTAGG AATAAAAGGG ATAATTITTIG TIGTTCACAA
AAGTAACTIG TCTAGCACCA CACATCAGAA AAACACAAAA ATAGCACACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT
AATATAACAT TINCTTATCT ATACAGAATG AAAGCCAAAA AGTTAACTGT ATAGAGATGT GCAGAACAAC ATTAAATATT
ATGGCTCAAA AGCAGGG

SEO ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTINICA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA ACTACTGGCC AAGCACGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTCGAGGTG GGCAGATCAC CTGGCCCAAC GCCACCGCT CTAGCTCCGG GCTCCCTGAG GTCCCCAGGTG CCCTNNCCGG TCCCACGGCT CCCACGNTGC CACCCTGTCC TGACTCGCCA CCTGGTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCCT GGAGGCGGGT GCAGAGGGAG AACCCAGGC

SEO ID NO:2188: (Length of Sequence = 335 Nucleotides)

GGCCCCAGCT CCTCTTCCTG CCTCTNINAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG
GTCCCTGCGT CTCCTGCCCA CTCTNACCGG GCTTCCTCCC TCCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGGCCAG
TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCCTGCA CAGTAAGAGC
AGGGCTGGGC GCCTCTTTCC TGGCCCGGAA GCCGCAGGGG CCCTCCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC
CGCTGCTCTT CCAGG

SEO ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACIGEIGGA TCAGATCGAN TICTACTITT CINATGAAAA CCIGGAGAAG GACGCCITIT TGCTAAAACA CGIGAGGAGG
AACAAGCIGG GATATGIGAG CNITAAGCTA CTCACATCCT TCAAAAAGGI GAAACATCTT ACACGGGACT GGAGAACCAC
AGCACATGCT TIGAAGTATT CAGIGGICCT TGAGITGAAT GAGGACCACC GGAAGGIGAG GGAGGACCAC CCCCGICCCA
CTGITCCCCA ACGAGAACCT CCCCAGCAAG ATGCICCIGG TCIATGATCT CIACITGICT CCTAAGCIGI GGGCTCIGGC
CACCCCCCAG AAGGAATGGA AGGGIGCAAG AGAAGGIGAT GGAACA

SEO ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT
AATCCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA
AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAATCCCA GCTATTTGGG AGGCTGAGGC
AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCAGTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA
AAACTCCGTC TTC

SEO ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGITTATAA AAGITTGATT ACTGGAAAAG TTCGATCIAA TTCAGGAAATT TCAGGCCCAAA TGAAACAGCC CCTTCAAGCA
AACATGCCIT CAATCTCTCG AGGCAGGACA ATGATTCATA TTCCAGGNGT TCGAAATAGC TCCTCAAGTA CAAGTCCTGT
TTCTAAAAAAA GGCCCCACCCC TTAAGGACTCC AGCCTCCAAA AGCCCTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG
GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCCCTGTTGC CAGG

SEO ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATEACEACEG CTACCTOGAG GTCATTGCCT TCACCATGAC GTNGTTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG.

CTGACGCAGT GTCGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC
AGCCTCACGC ATCCGCATCG CCCTGCGCAA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG
CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGICTCAGCA CTOGCTGGGT GACCCGCGGG AGCAGGCAAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGCAGGGA ACAGACCCAG GNTCCTGGGA ATCCTCTTCT GCCTAGCTTT GCCTGCCTGC CAGAGCAGGG CCTGCGGTTT GGGTNCTGTN ACCNTCCGGG GGCGGGGGAA GGGCAAGGNA GGCGGATCTC TGAAGTCCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA GAGAGGG

SEO ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCTCCATCTC CCGGGTTCAA GCGATTCTCG TACCTCAGCC TCACAAGTAG CTGGGATTAT AGGTGTCCGC CACCACACCT AGCTAATTIT TGCATTGTTA GCAGAGATGA GGTTTCGCCA GGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT CCACCCACCT TTGTTGGCCT CCCAAAGTGC TGGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC WO 93/16178 PCT/US93/01294

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TAATTCATTT GAGATTCCAC TOGATTCTAC TIGAGATTCA TCCACATTGT TGAATGCACA TICTTTTTTA TTTGTTCTGT AGCATTCTGT TGTGCAGCTG TGCCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTCCA GTTTTAATGA CAACTTCAG

SEO ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCTTGACC TGCAGGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT ACATAAATNA TATGINATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA ATAAGTGGGA CT

SEO ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAA AAATTATTAT CTCCACTITA CCAGTGCTGA CACTTCACCA ATGTAGGCT CTCAGTGACT AGCCCAGGGT
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCT TACTCAACAA GTATTTATTG
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCTGCA TCCATAGTAT
GAGCATTTTA ACTGGGGGAG GGTTTGCAAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO: 2197: (Length of Sequence = 313 Nucleotides)

GICCCTTGTG CATTGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCCTC
TCCCTTTGTG TTCTATACAT TGTGAATCTT CCCGTCTGAA GAACGCCCAG CCTGCCCAGA CAAAGCCCCG CCTTACCCAA
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC
GGTCCCTTCC CCCATCATCC TTCCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAA AGG

SEO ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGICTCACTA TGITGCCCAG GCTGGTCTCA AACTCCTGIT CTCAAGCGAT CCTCCTGCCT CGGNCTACCA AGGTGCTGAG
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAAACTNAGI TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA
AGAGAGAGTT CTGGGTTCAG GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAAGA
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEO ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCCTIGCC CTCTTCATGG CCACTTCAAA GIGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT
ATCATAAAGT ATTAATACTT TGTCATAAAG TCCTCCTIGA GCCCAGGGAC CATGGAAGIC AGCTAGAAGA GCCCTGAGCA
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG
GCTCACAAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAAA CCTCCCCATT GGGCTGATGA GAAAATACAC
GCAGGCCTAG CATGGTGCCT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGGT GGTGGTGGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC.
TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT
CTCAAAACAA AACAAGCAAA CAAACAACAA CAACAAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAAGTG
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAAA GTGATTCGTG ACTCATTGTC

TCCTCAGTCT ATAGCATTAT TAACTITCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GARACCARTA TARATTICAA ARTARACCAG CATACAGACC ARTIGCARTI TATAGARARA ATRARARATGI AGRARCATCA
CCTCCTCTCC CCGACCCCAG TACTGARATT ATACTTCCTC AGRCATACTG CCCCATCACT GGGRAGGGTG CCGACAGATT
GGGTACATIT ATAGANTATT ARATTARATTARA GIRACAGAGG CACCGTTTTT GCATGIRTGG TCCCARAGGAC TTITCARCTT
MITTITCARC ATTACAGTTG TTRAGRATGG ARATTGRAGG RATTGIRCAT ATTITCACTG GCAGTTTCTT ACAGA

SEO ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTCAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCACTGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCTCA
TGCCTCAGGC TCCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTTA GTAGATACAG
GGTTTCGCCT TCCTGACCTC AAGCTATCCA CTCGTCTTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT
AAGGAAGG

SEO ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTETOST OSTOSCICAT GOCACCACTG GGACCNAOGG GGT: OGGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT
CAGGCTCTCT TCCATCTTCT TCACAGAGTT TAATACATCT GACAGGGTTT CATAGTACTT ATGAGTGCTT TCACTGAGAG
TGCCTTCTAG CCACTGCTGA ATTATTGCTT GTTTGAGCTT ATCCTTGTGT CCGCTCTGAA GCTGGAATAA GGGCTTCANA
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEO ID NO:2204: (Length of Sequence = 353 Nucleotides)

SEO_ID_NO:2205: (Length of Sequence = 265 Nucleotides)

GITTCACCAT GITGGCCAGG CIGGICTCAA ATTICINACC TCAGGIGATC CACCCCICCT CAGCCICCCA AAGIGITGGG
ACTACAGGCG TGAGTCACTG CGCCCAGCCG TGGITTITIT TTTTTAGAAA CAGIGITTIG CCATGCTGCC CAGGCIGGIC
TCAAATCCAT AGGITCAAGT GATCTCCCCA CCTCAGCCTC CCAAAGIGIC GGGACCACAG GCATGAGCCA CCATGCTTGG
CCAGAAAGAA GITGITAACA AAATG

<u>SEQ ID NO:2206:</u> (Length of Sequence = 340 Nucleotides)

GCAAAGCTTA TTTTTCAGT TGTGGGCTCT AGTTTGGTTG GGAAACTATT TCCTTAGACC TGGGTCACCC CTCGGGCTCC CTTAATCTCC CGCCATATGT TCTCCAGAAT CAGGGCATGG TGTTCTGCCC TGGTGCGACT CAGCCCGGTT GCTTTGCACA GACTCTGGGC CAGGGCAGGACT CAGGCCAGGACT TTATCTGTGG CGCTCAGTAT GGTGCATAGT GTAGACACGT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGGC ACAGTGGCTC ACGTCTATAA TCCCCAGCACT TTGGGAGGCT

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SEO ID NO:2207: (Length of Sequence = 348 Nucleotides)

GIGITIGITI CICTITICAC CATAATIGIA AGCITICCIAA GGCCTICCCCA GCCCIGIGGA ATIGIGGATC AATIAAACCT
CIGICCITTA TAAATAACCC AGICIGAGGC AGITCITTAT AGCAGCGIGA GAATGGACTA ATACACCTICC CITCITIGAGT
CIGGAAGAAT AIGIGAAGGG AGATTGCTAA GGACTTATITI ACAGAATGGT TCITAAAGIIG CITGGGCAAG AACTATGTAT
TINIGGAGGC TGGIAGIGIT TCAGIGAATC TGAAAACCTI TGIGACATGT GAGAAAGGTA TGCIGICTICT GAAAGCTAAG
TGTATTATGA AGGACTATA AAGGGCCA

SEO ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCIGCT GIGCACATIG CITCAGATGG CTAATTATAT CITTIGGACIG TITGTACAAC CATTGACAAA TATACTTACT TICATTICTG CTAATGCAAC TGAAAAGAGC ATTCIGTAAA TIGAAGAAAA ACAAATAAAC AGNAATTAAC AACC

SEO ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGITCAGA ATCCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTTGCTCC ACCCCCTTCT CTGTTCCCCC
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC
CTTCTGTATA GAGCACGCTT CCCATCTTGT GGACTTGCTT CCCATCTTGT GGACTCGGAG GGTTCCGAGC AGCCGTTGAG
GTGANGCTCC TATGACACCT CCNCCGTGAA GCCTNCCTCA CTTTTCCATT ACCAGTGAGG CCTGCCACAG CCTGATTTGT
ACTCTGATCC TGGCACGCAT GGAAGCCATC TT

SEO ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTITCCAT CAAGAGICAA TGIATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTIG TTGIGAGCCC TGIGGAAATA AAATTAAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGIATAAG ATGITTATAA ATTINCTATT AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG CATCCAGAAA ATGITATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GITCCIGGAG TACCCICITC CCCCAACCCC AGACCIGCIT TCAGAGCAAA ACTCAAGICC CICITCCICC GIGAAGCITC TCCCICAGCI GAGCAGIGAT CACITACICA CICITAACCC CAATCCGCIG ACTGGGIGGG GACAGCACGI CCAGCCITCC CACCICICCT GCAGGCITCT AGACGGAGTI TCAAAAAACIG ATGAGCCICG ATCCAGGGCI TGAAAGAAGC CAGGGIGTAA TCITGITCAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCIG AATGAGTGAA TAGTIGAATG ATAGGIGCTC AATAAATGAA TGA

SEO ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGGTCTC CAAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA AGAAGAGAAA CTTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAAGTAA GAGTTCATCA TTT

SEO ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGIGATAA ACAACTITAA GCITATGIIT CITTATAGAT CACTGGCTCA CACATAATIC AAAACCCACA CAGAAGCTAA GAGICITTAC ATTAAATATA TICITCCTAA AAATCCTTAC TGIATGCATC TGICCTCAAG CAGIAAAATT TGATTATGCA CCATTITATA ATTAATATGI CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTITA AACCCTTTCT ACTICTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA GGTACATAAC GGTGGGTACA TAT

SEO ID NO:2214: (Length of Sequence = 259 Nucleotides)

GICATGGAGA TCCACAGCAA GIACINGCGC TGCCTGCAGG ANCAACCTCC ACAGCGGGGC GITCTCTGAT CGAGGCTCAG
ACTITCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCINTC CGTGGGGGIN AAGCCCGCCG AAAAGAGACC
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CCINIAGCAC TNCCTCGAAG NTGCTGTTCT CTTGTCTGTC
TTTAAGCTCA GCCAAGAAA

SEO ID NO: 2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCCACAG AAACTGCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA AATAAGTCGC CCCTCCAAAA CACGACCCCA TCCCACAGCG CTCCGCAGCT TCCCACCACC GCCCGCCTCA GTTCCTTTGC GTCTGTTGCC TCCCCAGCCC TGCACGCCCT GGCTGGCACT GTTGCCGCTG CATTCTCGTG TTCAGTGATG CCCTCTTCTT GTTTGAANCA AAAGAAAATA ATGCATTGTG TTTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT CATGTGGCAA TTGGTGCACA GCAGGAGGAA ATTTCTTGGG ACTINTTTAG GNTGAATT

SEO ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT GGAAGAACTC ACACTGGAGA GAAACCCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCG GCCTTAGTAT GCATGTACGA TCTCACAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCACGCCTTA TTCAACATAT AAGAACTCAC ACTGGAGGA AGCCTTTTGT ATGTGTTGAA TGTGGGAAAG CCTTTGCAGT TTCCTCAAAT CTTAGTGGGC ATTTNAGGNA CTCACACTGN AGGAAGGAAGG CCTCTGAAGT NINAGATATG TGGGGNAAGT ATTTTGGGGN ATCCCCCCAT GTCTTTAATA ATCCCCAT

SEO ID NO:2217: (Length of Sequence = 408 Nucleotides)

GICATCAGAG TICATCGIGA ACACCCIGAA IGCOGGCICG GGGGCCITGI CIGICACCAI TGATGGCCCC ICCAAGGIGC AGCIGGACIG ICCGAGGIGC AGCIGGACIG ICCGAGGIGC AGCIGGACIG ICCGAGGIGC AGCIGGACIG ICCGAGGICCACA AAGIACCGIG GCCCCAGCA CATCGIGGGC AGCCCCITCA AGGCCAAGGI CACIGGICCG AGCCITITCC GGAGGICACA GCITINACGN NACATCCACG GITCHITGIG GGAGACININ TACCAAGGICC TICCTIAAAG CCGGGGGCTI TCAGGITACA AGNITCCATI CCCCAAAGGIT INTICCTCAA AATNNCCAGC AAAAGGIGGG TIGACINGNG GGCCCCINGG GNITITCCCA GGGCTITC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCITTAT TTATAGAATC TTACAAATAA AACATTTACA GICCACATAA GITAATTINC TTTTCTAATT
TCTTCTCATA CACCIGAGIT ATTTAAAAAA ATACIGIGAT GGAACIGCAG AACIGTAAAG GGAAATAAGA ACAATAAAAT
CCTAACCTCI CTIGCAAAAA TCAGACAACI TIGITTTAAA GIAGATGCCC AGCATATTGC CATCICTTIG GAAGAGGACT
TACIATACIC AGCICTTACG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGIT AAGGGCCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCCTGT CCCACAACTT TCTCACGGTG GCGCCTGGAC ACAGCAGCCA CCACAGTCCA GGCCTGCAGG GCAGGGTGTG ACCCTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGGAGGG GGATCGTTCT TTGGGCTCAG TCTCTCCCTC WO 93/16178 PCT/US93/01294

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCCAAG GCTTCAGAAG CGGCCTCACC TCTMGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTC AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCCINCACAT CCCTGATTCC TGTTGTTATG GGAAACTNIT NCCAGAGATG
GAGGTTCTCT CGGAGTATCT CGG

SEO ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCCAGNCTC CCAAAGTGCT
GGGACTACAG GCGTGAGTCA CCGCGCCTGG CTTTGTTTAA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA
GNCATTTCTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GICTOCTGIA ATTOCCOCAA ACOGGITCIT GAGGATGIGA AACOAACTIA TIGGGCTCAA TOCCATTIGG TOACAGGATA CIGIACGIAT CINOCTITOC AGAGATTIGA TATOACOCAG ACACOGOCAG CATACATAAA OGIGITACCA GGITTGCCCC AGIACACCAG CATATATACA COCTIGGCCA GOCTITO

SEO ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTT GCATTTTAG TAGAGACGGG GTTTCACTGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TCGTGATCCA
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCATGT TTTCTTTAAA
ATTTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTCACATTG CTGCAGCCTT ACCAATTTGT
AGANACTGTT TATGTGATGT TTTGATTCTT CATTTATATA

SEO ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATIGCAGGC ATGAACCACT GCGCCCAGIC GAGIGGIAAT ATTITGAAAG GAAACCITIT TCTGAGCAGG TCTCAAAAGA GAGGITAAAA TACTGAGIAG ACCATGCIGT AAACAGAIGT GCIGITATIC GGGCITTGAT ATTCCATTIA TAAAGCACAG GCAGAGCTCA GAGIAGATIT AATGIAACIC TGAAGGGCAC TAGGATTTIN AGAATGGTAA ATAAGCATIG GCTTCAACIT AAATTCAAAT CTGCATTGGC TIGIAATAAG AGACTAGCIT GITACTGAAG CTTINAAGCC AGTIGITTIC TCCTATCTAG CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTTCTGGCC AGGCGCGGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GETCGAGGAG CCTGGGCCGG GCCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG
CAGTCAGCGC CGCTCGGACG CCGCCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGCGCTGC
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCCAG TGGGCGCCTA TTCTTGGAAA TTTTCTACAC
ATTATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCAGT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC
ATTCAATATC TCTGTACATC GGTCATGGTG GAGAGAACAT GGGGCCTGGT TGTNTCAAGA AGAGTGCTGC CTTCCCTCAA
GCCCCATGGC ANNGATGGAC

SEO ID NO:2226: (Length of Sequence = 264 Nucleotides)

GRACCIGCTC CCTGCCGGCA CCITIMITGG TGGATATITA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT ACCTAGGCTC GGGTTTGINC TGTGTCGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCTTGG CAATGCACTG GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCTCG GAGTCCTAAA ACCGGGCCCA GAATTACTAG CTCAGATGTC TGGAGCGATG GCTTTGGGTG GTAC

SEO ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTEG GECACTGGGG CAGGGGGGCT GGCACATTCC TCAGATTCTG GCATGTCATC CTGGAAGTAC TCAGCCTGGC
GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAACTGCT GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTCACGC
ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA
GCCACTGTAG ATGAACTGCT GGCCAGTGCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC
CCCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCCGCCAG GCTTTTTTNG GGCACTTTCT GCCACCGATA
GT

SEO ID NO:2228: (Length of Sequence = 394 Nucleotides)

TITIAAAGIGG AAACAATGIT TITIAAGAGGI GATATAAAGA AATGCCCCCA CIGIAATCCC TACCATAIGI TGATICIAIG
TGGIGGGAGG GAGGGGAGAA TGATICCITT TICTAGAATC AGAGAATITIG GAAAGIATCA AGAAAGATAA TAACAGAAAG
CATGAAATAG AGIIGIGCIT TGAAGAIGAA TIGGATGAAA TINITAIGIG AAGAGGAGIT TICCAAAGII GCAGACCCAG
GATICCIGGC CAGAAGCAIG AAAACGIITC TITCTTACIG TITCTAGGAC CIAGGCAGCA TITCTICCAI GICIGCAACA
ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATICA TCIGCITIGG ATCCCATGGA CAGICATGGI GICT

SEO ID NO:2229: (Length of Sequence = 342 Nucleotides)

TITITITIAG GATGATICAG TGITICTITA AAAATAAAAA CCCCACAAAA AAGCAGAAC ACCCIACCCA ACCCAGCCCA GIGIAACAGG TIAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGICATTACT CGGCAGAGGG TGICCAGCCT GGICGGCCGA CGICACAGTG GATGGCCCTG CGICGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACCCAGA GCACCAGAGGC TGAGCATGAC CACTGGAAAA AAACAAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GIGGAATGCA GCCATCACAC AGIAGITICT GAGATIGCIT CCGICTAGGI TITATGGGAA GATATITCCI TITCIACCAT AGGCITCAAG GCCTCTAAT ATCCGCTIGG AAATACTACA AAAACAGIGI TICAAAACIG CICTATCAAA AGGAAGGATC CACACIGIGA GITGAATICA CACATCACAA AGAAATCICT GAGAATICTT CIGICTGGGI TIATAGGAAG AAATCCCGIT TCCAAACGAAG GCCTCAAAAGC GGICCATATA TCCACTTGCA GATTCTACAG AAACAATGIT TCCAAACTGC TCTATCAAGA GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEO ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GICTCACTIT NINGGCCAGG TIGGICTCAA ACCCCIGGIC ACAAACAATC CTCCAGCCTC ANCCTCCCAA
AGIGCIGGCA TIACAAGCAT GAGCCACCAT GCCCAGCTIA AGGGGGATAT TITIATAGAG CATCTIGCCC TGGITCIGGA
ATTCICTGIA GATAATACAG TIAACAGATA TICCCCIGAG TGATTAAGAA CCITTCCATT TGACIGATIT TNCAGAAAAG
TITACCTATG TAACCTCAGT GGGTAGCACA ATGCCTGACA CATCTITGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG
TCCGGCCCTT GCTCTTGAT TGTGGGCAGC CTCCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC
CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG
TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCTAT TGCGTGGCTG
CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNOG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT
GACCTGTTGT ATTGGCGGGA CATCAAGCAG ACGGCCATCG TGTTTGGGAG TTTCCTGCTG CTGCTCTTCT CCCTGACCCA
GTTCAGCGTG GTGAGCGTCG TGGCCTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCCGCATC TACAAGTCTG
TTTTACAAGC AGTGCAGAAA ACCGACGAAG GCCACCCTTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG
CAGATTCAGA AGTACACGGA CTTGCCTGCA GTTCTACGTG AACAGCACAC TTAAGGAACT NAGGAGGCTC TTCCTTGTCC
ACGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTCCC ACCAAGTGCA ACACCCINCA NTGTGCCTTT TGGACCAGCA
CCAACAGGAA TGTATCCCTC CGTGCCTCCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCCTCCTT CCGGACCATC
ATGTCCCCCA NCTGGTGGTC CTTATCCAGC CCCAACTGTG CCGGGCCCTG GCCCCACAGG GCATATCCTA CACCAAATAT
GCCCTTTNCA GAGCTACCCA GACCATATGG TGCACCCACA GATCCAGCTG CAGNTGNICC TTTAGGTCCA TGGGGATCCA
TGTTTTNTGG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCCTACCCN GTAATATGGC NATATNCAIN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTCC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT
TCCCTGAAGA TCCAAAAGAT GGCCTTGTGA AAACTGATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA
CTGGATCGAA TTGGTTCTTA CCTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC
TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTA AGCCATTGT AGAAAGCTTT CTTCATATGG
TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGGAACA AATTCT

SEO ID NO:2236: (Length of Sequence = 399 Nucleotides)

TOGCAAGAAC ACTGAAACCC AGCCAACTTC TOCTCAGCTA GOGACCAAAA CCTTTTTGTC TGTAGTCCTT CCGAGGTTGG
AGACTCTTCT GCAGCCAAGG AAAAGGTCGC GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC
TOGACGCAGG TCTCACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGGGGG GCCTNGGGAG GAAGGCCACA
CCCCGACGAC GCTGTGCCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA
ATNTGGGCGG GGGCAAACCG GCTCTTGTGC GACGCCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

<u>SEQ ID NO:2237:</u> (Length of Sequence = 234 Nucleotides)

AAANIACTAA CATTITIAAT ACAGICIGAT CAGATCAATT CACATCACAA GGTCAACCNG GGCTIGCTCA CATGIGNCAC
AACTGAGGNA CACAATGTCC CIACCTGCCG GCTGTCCCAC CTTCCTGGTT CCCAACAGCA TTGAAAACCCC CIACTTCCCT
GACCAGACTG GCATTTTTTA AAATTTTGCA TAAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEO ID NO: 2238: (Length of Sequence = 369 Nucleotides)

ATTTAAGGCT GTACTTAACT AATTTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG
TCATGGTTGG TCACTTTTTA AAGTATTTGA TTACTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT
TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGCGG TGAAAAAAAA AAGGCATTAC CTGATTCACA
CCCTTGTCTT GCTAGCCCTC TTCCATTCAT TTCTCACACA GCACTTTGCT CTGTTAAATC CTCTCTGT CTCAGACCAT
TGCTTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEO ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTIGCT ATTTACAACA AATAAATATT GCCCCTCCCC AATCAGTAAA CAAACATTTT
TTTTTTCTTT TTGCTTTTTA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCCTCACTA ACCCCCGTCT
TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTGAATGGC ACTTGCAGTG GCATGAGATT CAACATCGAT GGGACTCAGC
TGGGACTGTC CTCACTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGTT TCINTCTCTG CTCCCAGGGG AGGGCTGGGG
TAAGCCGTGG GTGAGACTCC CTCACTCTCA GTTGGNCCTG ATGATGGAAT CTTTNGTGCA GCCTGAGAAA GGCTAGAGT

SEO ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTTAATGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG
ATATATACTT CACAGTCTGA GGCCTGGTCC CAGGAACTGC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT
TTCAGGATGG AAGTTTGATT CTTCAGATTG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC
CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG
CCTCAGTGCC TGANCCCTAG GGGGATTCGA GTTGGCTGCT GGATTCATTT CCTGCAAGCA GGCCTGCA

SEO ID NO:2241: (Length of Sequence = 377 Nucleotides)

CICCATTIG TCCIAGITAC TITTAAGGIA TAAGCIGAAG TCATIGATIT GAGATGITIC TNCITITCIA ATATAGGIGT
TTAATGGIAC ATATTCCCC CICAGITACIG CITTAGIGGC ATCCIGCAAA TICTGACATA CIGIGGITCA TITTAATTCA
TTACAAAATA CITCITAATT TCCCITITGA TITCCICITT AATTCATGGG TIACTTAGAA TIGIGGITATT TAATTINCAA
GIACTIGGGG ATTTATCCCT CICIGITATT CATGICTAAT TTAATCCCAG TGIGGICIGA GAATATATTT NGATATCAAT
AAAGCIACTC CAGCIACCTT TIGATTAATG TIATCACAGT ATATCITTIT CTATCCT

SEO ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAAACACA ACACACATGA CAAACTCTAA GTCTCCAGAC AGACACCCTC AAATAGGCAC TIGGTGTTT
CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT
GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCATGGTA GATGGGAAGG GGGCCTGTTT AAAGAAGACC CCCCACCCCC
ACTGCCCCATT TCACCACAAC AGTGACTTGC TGGAAGTTTT GTGCCCTGCG GATTTCTGAA TATAGTGGAC AGGCATTTCT
AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAAA TGTGGGCTTT GCATGTTTTG G

SEO ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTATT AAATCAGACT GITATICITA ACAGITATGI AAGITACATG TATGITTAAG TCAGAGIAIT TCACATGGAA
AAGITITTAA CICCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT
AAGGCAAGIA TATAAAAACCA ATAAAACAAT AATGAAAAAA TTCAAGCATT CCTTTAAGAG AATTCAACAC TACAAGCTAA
ATGIACITTC TGAGIGIATT CGIATAATCA AGGCAGIGIT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATTA
GIAGATACAG CIGCCCTCAA GATTTCAATT TCAGITTGC

SEO ID NO:2244: (Length of Sequence = 362 Nucleotides)

ATATGIACTA CATTIGGIGG AATACGCATG TACAATTCIT CAAAAATAGI AAAGAGCAAA ACAAACAAAA AATAGIAGAA GCACTGGAGA AATACACTAT GGCATAAACT AGITACGGGI GGGATGICAC AIGGACCATA TCTACACTCI GIGGCAACCT TCTTACCTGA CICCAAAGGA TCAGATAATC AAACAGGAAA TTATGGIAGG AAATCAGAAA AITGAAGTAT GCATTCATAT CCTAAGCATT TTATTITAGC TCAAAATATA AAATATTCAT CAGITAGCCA AGCTITGGGA TGAGAGATCA TAGCCTCCTC TTTGATAGGA GITTCTIGIT TTCTTGATTT CATGITTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACCGG AGATTAAGCT GCCAGTGGAG ATCAGTGGG CCATCGAGGA
GGAGTTCACT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG
AGAACCTCCA GGTGGAGTINT CACCGCAAGA TGGAAGTNAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCCTATGA
CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACCC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA
TAACCCAAAC ACCCCACCAG CCCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA
CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAAATTTAA ATTACAGTAT TTAAATTAGA
ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG
AATTTTAAAA CAGCAAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCCTC CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG GCTGGGAGAA AGCAGGCCGT GCTCTGTGGT CTCAGAGTCT TCCTGGCGCT CTTTGGAACC TGACAGAACA TGACCTCAGT CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCTT CGCAGAGACA CGAACAATCT CGTCTCTACC AGAGGCCTGT GAGACAATCAG CTCAGGA

SEO ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTTAT TAATGGCTAG AAAGTCAGGT TCACCCAAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT
GGCACCT

SEO ID NO:2249: (Length of Sequence = 404 Nucleotides)

SEO ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TIAAAATCAG TCAAATTATT TTTAAAATTC CITTGCTTAA
TAGCCATTAC TTACTCACCT TITGTTTTTG TTTTTNCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCCTTCTA
TACATTCTGC CITCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT
GTACAGAAGT TGGTTGATAT CGCTGATTCA CITTT

SEO ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TECTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCACTACA TCAGCTCAAG
AACATAAACA AAAATGTAAT TTAAAAAACA GATGGTTTAA AAAAATATCT GATAAAAATT ACCTATCCCT CTCCCTTGCT
GTGAAATAAT TTAAATAATT TATTCTAGAT GTAAAAATAA TAATACAAAA AAGTTTGTTC AAAGACACCT GTGTCCTGTT
TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC
TCTCTGGATG CAACCCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCACTTCTC TGAGGGCTAG
GGCTTTGATT CTGAACATGG GGGGCT

SEO ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAAATTAA TAGACCATTA GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG
CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAAGATCA TTCAAGGCTA CTATGAACAC CTTCACGTGC
ACAAACTAGA AAACATAGAG GAGATGGATA AATTCCTGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA
AAGGGTAAGA GTGGGGTGAG GGATAAAAGA CTACACATTG CATACAGTGT ACACTTCTTG GGTGATGGGT GCGCC

SEO ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATITATIC TCATGIACAA AGCGGICAGC CCACGGGACC ATATACGACA GITGCACAGA GICCIAGAAA AACGCATCIN TCIAAAGGCA ACICAGAAAG GIAAGGCAGG TGGACCCCT CCCCCACCCC ACAACGCACA CAGAAIGAAAA CGGAGAAAAAA GAGAAAGACC AGTGGCCGGG CIGACCCCAAG AGTCCCGGCC CTATGGGGIC TCCCCAAGCCC CAGGGCACAG GIGGATATGG CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG GAACACTTCA GGGGG

SEO ID NO:2254: (Length of Sequence = 380 Mucleotides)

SEO ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGITICIGIG ATICINCAGA GCCCAGGAGI CAGTGCTGGI GGITIGGAGG ACCTGCCCCC ACTGGITCAT
TTAACCCTCT GTCTCGGIGC CCTCAGAACC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG
TGATCIATTC ATICIGIGAC CTCAGGGGIC ACATATAAGG TCAGTGTTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG
GGATTGGGIT CGAACAGCTT CATAAACATC TTCAGCATTT TGIACCATCT GCTCCCCAAT GGCCAAAAATC ACATCACCAG
GNCGCAGACC CAGCCCGGIG TGCAGGGGAGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEO ID NO:2256: (Length of Sequence = 371 Nucleotides)

SEO ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCIATEG CACTAATGIA TEATEGATIC ATTICCAGAC TGICGGCCAC GGAAGCACIT CITCATGGCC TCIGCCCTGG
ACAGCAGCCT GTCCTCCGGG CTCCCCATGT TTITACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT
CTTTTCCTTG AAATTCTTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC
AAGAACTTGT TGATAAATGG CTTAAAAGTT TTTACAAGAA GTAACTTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA
TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT
TTTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGCGGGTCT CAAACTCCTG ACCTCGTGAT CCACCCGCCT
TGGCCCCCCA AAGTGCTGGG ATTACAGGGG TGAGACACCA CGCTCGGCCT TTATATATAT TTTNAGAGAG GGGGTCTCAT
TTTNTTGCCC AGGCTGGTCT TGAACTCCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG
GCAATGAGCC NACCGTGNCC

SEO ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCCAGAT CCCACTGITA GGAGAACGCC TCTGCTAACA TTTTCTCTAT CTTGTTATCC TCTGGGAATG AGACCCACTA
AAGGGCTAGA GTGTTGCTCA GTGTGAATTC CTCTTTCTCG ACTCCATCTT CGCGGTAGCT GGGACCGCCG TTCAGTCGCC
AATATGCAGC TCTTTGTCCG CGCCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTCGCCC AGATCAAGGC
TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCGTGCTCC TGGCAGGCGC GNCCCTGGGA GGATGAGGCC
ACTCTNGGCC AGINCGGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCCGCATGCT TINGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TITITITITE AGATCIGAGA TICCITTAAT CAGAAGCACG TECGTCCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCACGC CTCTAGGACT GCNICCITAG AGCGAGGCTC GGGCTCTTGG TAAAAAAAGCA TITGCTTGAT TITATITTAAA CAATGGTGAA TCTTCAAGGT GCCAGTCTAC ATGCCCAACA GTCCTCCAGG NITCAAGGNC ACAGTCACCG TCACTCAGAG ACTGCCTCAT TINGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCACGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA GAAACTGGGG GCCACACACA AGNGCCCCANC AGGTGCGCC

SEO ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT GAGACAGAST CTCGCTCTGT CGCCAGGITG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCCGCC
TCCCGGGTCC AAGCAATTCC TCTGCCTCAG CCTCCTGAGT TGCTGGGACC ACAGGCGCAC GCACCACGCC AGGCTAATTT
TTGTATTTTT AGTAGAGACG GGGTGTCACC ATATTGGCCA GGCTGGTCTC TTCGAAATCT TAAATCCAAA CATTTCTATT
CTTCTAGATC CCTTGCTCAG GCGAATCCTT TCATCTTTCC CTTATAGCTC ATCAGCATGT AAGTGTCTTG ACATCTCTCT
TCTCCTTCCC TATTAGCTCT CTACTCTCIN CANTTACACG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

CIGICAAAAA TGIATIATAT CAATAATITI ATCAGCAGCA TITIAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA
TGGIAATGCA GTCAGGCCAG CACACAATAC ACCGITITCA TCACACACTG TAACCIGAAT CCCIGGCAAT TTCCIAGAGG
TATIAACATC ATACCITATI AAGAATTATI GGCCCCNAGG AGINGGGGGG TGGGGGGGIT GCAATCIGIC CAATCAACAT
CIGGCTCTTA CTITCTCCCN GIAGIATTAC ATTIGIATAA TATICTIATA GGAAACAACT CAACICCAIG TITIATAAAAG
CACCATACGG TNITTCCATC CIGIACCA

SEO ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA
AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACTCCC ANTAAACTTG CCACGCTCAG
TGTTCGAGCC ATGCCCCTTC CAGAAGAAGT CACCCAGNIT CTGGAAGAAA ATAGTGANTT GATTCGTTCT ATGGAGCAGT
TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCNNENGA AAATTTNGGA ATTCAAAGGA
AAACTTTNAG CAACANCTAA CAGGGNGNTG AT

SEO ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTTCCAGCC CACAGCCCAG GATGGCTTTG AATGTGGCCC AACACAAATT CATAAACTTT
CCTAAAACAT TATGAGATCT TTTTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG
CCCAAGATAA TTCTTCCAAT GTGGCCCAGG GAAGCAAAAA GATTGGACAC CCCTGGTCTA GAAGGAAAGG CAAATATTAA
ATAACCTCAG AAAGTGATAT TACAAATTGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG
GTGAGGAAAT TCTTATCAGG GNAGTGATAT TINANTGAAG GGCCTTAGGG GATGAGTAGG G

SEO ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACTCITCCT CCATCCTGCC TITCCACAGC AGTCAGICTG GICCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC
ATCITCCTAAC TGGTCCTCCC ACTTGCCGTC TITTATTCTGC ACACAGCAGC CTGAGTTCAT ACACACACGT GCATTCATTC
ATATTTTGCT TAAAACTGTT CAATGGCTTC CCATGGAACT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA
GGACCAATCT GGACACCCCT NCCTGTTTGT NCATNCATGC CTTGCACCAC TNTTTGGCCT T

SEO ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCCIGCATG CCCCACAACA ACACAACTIT ATTCCICTCC CAAACATCIG TCAGGCCTGG CCITCCIGAG CAGGAGCTGA
GCAGGAACAG GGCCTGGCTG CCICTCCTCT GCCACAGCTC TGACCTGGGC AAGGCTGGAA GCTGGCATCG TAATGGATGG
GGGAGTGGGT GGAGGATCTG AGGGTCCCCT GGGTAGGTTC CGATACCTTG GACAGGTGGG CCTCATCCTG ACTTAGAACT
CGGGGGAGGGG CCACTCTTCC TTCCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCCTCGA CATGTGTNCC
AGAAAACCCCA GCCATGAGGG ACCGCTNTGA GGAAGGGTCT

SEQ ID NO: 2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CECTCTGTCA CCCAGGCTGG AGTGCAGTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC
CACCACCCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTTCTACCCT GCGGAGATCA CACTGACCTG
GCAGCGGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCCTGCCAGG GGATGGAACC TTCCAGAAGT
GGGCCGCTGT GGTGGTGCCT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTACC CAAGACCCTC
ACCCTGAGAA TGGGAGCTTG TCTTCCCAGC CCACCATTCC CCATCGTGGG CATAATTGCT GGACTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

CTITCCTCTC CTGTTCACAC AGTATTCGAT TATTTCAATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGGA AAAAATGAAT TTAGACAAAT
ATTTAGTAAC TGTATGATAT ATAACTCCCC N

SEQ ID NO: 2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TITTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTIT TTGACCGITC CAAGTCTTAA TGCCACACCA CTATTCCAGC GAATTTATGC TACAACTGGT AACAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC MTACCAGCTC TGGCTATAT TGCTCCCATG CATTTAATAT ATTATMINGT TTTATANCCA CITCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGITAAG GAATITCCIT TATTITITAC AAATTAAGAC TATGCAGATI TCATATATIT CTGAATCAAA AACACCITTG
TCTTCACAGI ATGAGITAGA ATGCAGCCTG AGCIGAAAAT CAAGAAACTA GAAAAGAAAG TCGTAGAGAT AACTATATTA
AAAANCIGIT AGGIATTICC TITAAAAGIA GGIGITTITT TTTTITTINCC NICITTITIT TIT

SEO ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCCTAGCA TCACCAGCAT
CCTGAGCTTT GTCTTGTGTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNTT AGCAGCTGCT ACTTGAACCC TAATCCCTGG
GTGGATGTGG TCTCTTGTAA CTTAAGAGCA AATGTTTGTN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGTCCA TTCCTGGGGA TTNGGGGAAA
GAACGACAGA ACTTACCTTC CATCTTCCTT CTCACAAGCA GTG

SEO ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC ATGGTGAAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGI TAATAAAATC ATGIATAAGC AAAAGACCTA TGAAAGIATA AAACAGACCA ATGGATTITA GIATAAAAGI ACAAAACGIT CATTGAGGIG GGITCAGITT TCCCACAAAA ACIAACCITT AAGAAACTAC CACITATCAA GITTGGIAT AAGGIATAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACACTT TAAATACTTT CCTTTTTTCC TACTACATAT CTCTATTAGG CTGGGITTTC TTCACAACTA ATTGAATACA AAAACAAATA TGAGNATITA GCTGTAATCT ATTAATCCCG ACATTACAGG

SEO ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TIGCAGIGGT ATATGCCTAT TGTCCCAGCT AATCAGGAGG CIGAGATGGG AGGATAGCIT GAGCCCAAGA
GITTGCGACT GGGCCTGGGC AACATAGCAA GACCCTATCT CIAAATCAAT CAATCAATCA AACAGIGGTA TGCCACCCAG
AATAAGTATC TITITTGAAG TAAAAAAACAA AAAGCGAAAAT GGGAACAACA GGTCIGGTAG TGGTGGCTGT CTGTCACTGA
CAATGAGGTC TCTGCAGAGC CGITCCCTAC CCINCCCAAC CCCCTAGACA TCAGGTCCCT TTCCTAGGAA AATGAGAGCA
CAGACCTAGG NCCATGGNCT CCCAAACTTT TTCTTCTCTT CACTACAGAT TC

SEO ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATTCTTT TCCTGAGGAT GITGGITTTA TATGGATTGT CTTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA
AATGITTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTITTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

TAITACACAA CIGITGITAA AITCIAGIAA GATAAATIGA TACIAAAGAA AACAAACCCA GAAAGATCAA GIGACIIGGN TCACACAACA CAGGNATTAA GANGGAAATT AGIATTCITT GITGGAATAT TITCCATTIG AATAGITACA GGAAAATTTA TITGCATATT TIACAAATTA AATGIGTATT GGACATCATA GIGGGGAAAT

SEO ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGIC CIGGAGGCAA CCGCAGAAAC AGAACANIGC AAATGCCAGC ATTTCCGCAG ATAAGCGIGG CCCGCCAGCT GCAAACACCC CIGACATGCA GCCGCTGTT TAAAATCIGG TIGCCCGCTG CAGCCAGIGG AGCTCAGAGG GCIGCCTGGC GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGGAATA TGATGGGGIC CGAGCCAGCC AGTAACTCCA NGAGGGCTGT AGTGTGTAAG TTCGGCCAGA GTTTNCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT GTGGCCGCTC AGGGTTAAGA GACGGGAGCC

SEO ID NO:2277: (Length of Sequence = 182 Nucleotides)

CITTATATAG ACTOTOGITO TAGAAACTOG COTGCAGCOG CTGGCTGGAC CAGCACACGO TGACGGGGCC GGACTATTTA CAGGCCCATT GCGGGCTGTA COTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGNCA AAATAAGTTA GGGCCGGCCG GGCGGGGCGG GGCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTIT CCCCAAATGA AGCAAGCAA GTACTGGGGC GGAGTCATCA GAAATACCIT GGGAGGTGGT GGGGAGGGGA GTCGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCCTC TCAGGGGTTG CGACTGGAAA NICITGCGTT TTCCATCACT GGTGCAGAAA GAACTTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGNCGCAC GCTCAGAGCA GTCTTCCTCC TGGGCTGGGT GGACGCGGAG

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TECACCCATE GCCCTCCCA GAGCCCCAGG GCCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCCATG GAGGTGCAGG
AAGGCTATGG CTTTGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTCAG GTGTGAAACG GTCCCGCTCA
GGTGAGGGCG AAGTGA. G CCTTATGCGC AAG

SEO ID NO:2280: (Length of Sequence = 401 Nucleotides)

GIGATITICC TGICICCGIC TCCIGAGIAG CIGGGATIAC AGGIGCCAAC CACCACGCCC AGCIAATITI TGIAGITITA GIGGAGACGG TITCGCCAIG TICGCCAGGC TGGICICGAA CICCIGACCI CAGGIGATCC ATICCCCTCG GICICCCAAA GIGCIGGAAT TACAGGCAIG ACCCATIGCG CCCGGCCCCA CIGTITCCTT TCTAATCGAG TGAGAAAATG GICAGIATITI CIGICAACAA AATICATGAG GCICITITGIA CGCACAGGAC TICAGGCCTT TCTCTCAACA ATCGCCAAAG CIGGAGGCAT CCACAATGGA GGAACAACT GGGGGTTTIG AAAAAACAGG GAATGITTCC AGAATINTIC TICAAGAGIA TITACATITIT

SEO ID NO:2281: (Length of Sequence = 217 Nucleotides)

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AGCACGGGA TTGTCCAAGG GTCCTCCGGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCCACTATG CAGTCAACAG CCAGTTCACN ATGGGCGGCC CCGCCATCTC CATGGCGTCG CCCATGTCCA TCCCGACCAA CACCATGCAC TACGGGAGCT AGGGGCCCGN CCCGCGNAAC TNACAGCACC AGGAAACCAA ATGNATGTCC CTGCCCG

SEO ID NO:2282: (Length of Sequence = 302 Nucleotides)

WO 93/16178 PCT/US93/01294

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COGATGGIGA AGIGGIAAGA GGIOGATGGC CIGGGAGITC ACTITATIAT GAAGTAGAAA ITCIGAGNCA CGACAGCACC
TCCCAGNITI ACACIGIAAA GIATAAAGAI GGAACAGAGC TIGANITGAA AGAGAATGAI ATTAAGNCII TAACTICCII
TAGGCAAAGG AAAGGIGGCI CAACIICCAG TICCCCTICC AGACGCCGAG GGAGTCGATC AAGGICACGC TCCCGATCCC
CCGGICGACC ACCIAAAAGI GCCCGCCGAI CIGCTICTGC TITCCCACCA GGGCGACATI AA

SEO ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTTGACAA
GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC
AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCCAGAT GCAGATCGAC
AAGGCCACCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

SEO ID NO:2284: (Length of Sequence = 262 Nucleotides)

GEOGRACAC ACGCGCCCGG CCTGTTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTTCCGTT CAACCCTTNN CTGTGGTCAG GTTGATTNCT TTAATTGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTTGTNT TCACTTATTT ATAGTGCTAT GAAGCTGGTC ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG
TTCAAGCGNT TNTCCCACCT CAGCCTCCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTTGTGTC
TTTAGTAGAG ACGGGGNTTT GCCANGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCAGTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTCACAC CATTCTCCCG CCTCAGCCTC CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTTTTTG TATTTTTAGT AGAGACGGGG TTTCACCATG TTAGCCAGGA TGGTCTCAAT CTCCTGACCT TGTGATCCGC CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN CACTTGCGCC CGGCCTTCAC CTGTTAGTTT TTCAAGAGGT GTTCGTCATG TCCACTGTGA TAGTTATTTT GTGTGTCAAA CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

SEO ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACACGNTC CTCTAGGCCC TTCAGCGGCA NAGCGNCTCC AGCACCCTGT TGTGCTCCAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEO ID NO:2290: (Length of Sequence = 310 Nucleotides)

CCGACTCTAC TGAAAATACA AAATTAGCCG GGCGTGGTGA CGCATGCCTG TAATCCCAGC TACTCCGGGAG GCTGAGGCAG
GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGGC TGGGTGACAA GAGCAAAACT
CTGTCTCAAA AAAAAAAAA AAAAGNITAA ATGAGGTCAT GAGGGTGAGA CCCTGATCCA AGCTCATAAG TGTCCTTAGA
NGTGTCCTTA GAAGTGTCCT TAGGACACTT CTTTCTAAGT NTCCTAAGTT GGGGAGCTTG CTCTCCCCAA

SEO ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATTGCCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC
AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT
GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC
CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGITGICCT ATATTCTCCA CCITCCCTTG GITTCATTTC TCTTCGCTTC CTGAATGAGA AGTGCCTGAG ATACCTTCAT
TTCTCTTGAA AGTATTGATC CAAGITTAGA CAAATATCTC CCCTCTTGTT GAGAGAATTC CTTATATGTG AAAATACCAA
GACAITCTTG ATATTTAGCA GGCACTCAAA TATTTGTCTC CTCTTTTTTTA GCATAATTAA GCCAGACTGA TGTTTGCATT
TGAGTATCAT CAGCATGAGT AACCNITTTA ATCTCTCTTC CCTTAACTAC TTGTTCTACA CTAGAGTCTA GGGTCAGGGT
ACGTACAGTG AT

SEO ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCIGACT TATGIGAGIN TCAGGCITCA AIGCCIGINI TAGAGCIACT CCITCACACA AAATAGITCA GAACATAGAG AAGGACCAAG GITAATAAAT GATTITNATC CCAAACACTA AACATGAITG AIGGGIAGAG GCIGCCCGAA GIACIGIGIA AAGAIGGAAT CIGAGAIAGA AGAATGCIGI GGICAATTAG TAATTCITGC CCAIGGAGGG AITAGIGACA CAIGCCITGI ATATTIGICA TCIGI

SEO ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA
GTAAAATTGA TTTTNCCATA AAAGAAGTTT AAAATAAATT AGCTATTTCA AGACNATCAT GGTTGTCAGC AAATAGAAAT
GTTGTGCTTA ACTCAAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEO ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCIGIA TATTACCCAT TTAAACCCAT GIGIAACATT CAGIGATGIG
AGCIGIATTA AACCCAGGIA TTAGIGAAAA TTTGCATTGT AAAACCIGGI AACAGTAGAC ATCTATGGGI GGICAGTAAT
TCAAGGACAC CTTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA
TACATATTTA CATTTTTAGA AATAGTTACT CIGAGGITGA CAGCTGICAC TTTTCTAAAT ATTTACAG

SEO ID NO:2296: (Length of Sequence = 279 Nucleotides)

SEO ID NO:2297: (Length of Sequence = 306 Nucleotides)

WO 93/16178 PCT/US93/01294

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CTGAGAAGAA AGAGTIGTIT GTAAAGGACA ATGACTITGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA
ATTCCAACAA GAGCTIGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TITNAAGCAA CAATTGAATA
TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG
ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTCACAC ATTGGGGAGA GAACCC

SEO ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGIACACCTA GIATCITIAC AGIGACIATT AAGIATTITI GAACTCAAAG TATATATICA TCTTAAACIC CIGGAACTAT
GAACCCTCCC ATGIAATTIN CIGATGAATG AAAAGGAAAA CITTCITICA AATAAGIGIC ATCIGITGCA AAAGTATGIG
ATTIAAAAAC ACATGIAAAT ATAATCITAG CICTAATGIT TCCCTTIGGG AGITTGGGAA AAAGCAGITA CATTTCICTG
TTGTCIGGTT TITATCATTT GAAAATTGGA AGGATTCATT CIGGATTGCT GAGCTGCATC AGTAGGG

SEO ID NO:2299: (Length of Sequence = 289

GITTITAATG CATTITITIT AAAGATTAAA GITAAAATGIC TCAATIGIAA AAAATACACA CCGGGCAAAT CCITACCIGG
MIAATAAATA TCTACATCAC AGTACAATAA AATINCINCI CTATAAAATT TAAATATGGA TTATAGICTA TCACTATCAA
AAGAAACACI ATGCTAATAT TICCATATTA TTAAAATAAC AGGAAAAATT ACGRGCITAT TITAGAACCI GATGCCATAG
CCGTTGGAAA GGGCAAAGAG ATICAAATGI CGATCATCAC TCTCCATIT

SEO ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGACAG CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTGTCC TTTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA GAGTTTATTC ACGGTTCAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEO ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTIGGIGIT GGGATTIGIT GIGAGGITIG CIGACACCIT GACCATITIT CACTGGCTGG AAATGAAAGG AACTICCCAC TIGCICTITIG AAGGCAATIC CATICICCC AGGGTCCITA TITCCITCCC ATATICICTC ACACTCCCAA ACTICIGAAG AAGGGAAGCA ACTITGGCCA CGAGGAAGGA GINGAGCTGC CICTGTACTT GICACTGCAC CTGCACTGGT TGAATCCACC TITCCIGGGT CACGCCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

<u>SEO ID NO:2302:</u> (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT
GATGGGGCGA GCATAGTGCA CITCCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TGCGATCCAG
AGCTGGAGCC CCAGTCCTTG GCCTTTAACC TTGACCACTC TCGTCGCTCA ACCCGCCGTT TGCTGGGGAT GAACCCAATG
TCGTCGGTCT CACTGTCAGA GTGGACCCGC CGTGNCTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN
CCCAAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCCTCCAAG GGCCCCGCAG GCGCCTCCTT GGCCTCTGC TCCTGCTTGC CGCTGGCCTC
CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGCTGG TGGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC
GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG
TGCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG

TTCATGACGG AAGCCCCCCA GGCGGGGTA CATGGTCANG GACCTGGATG ACGGTCCTCA TGAGCAACAT GGGCAAGGGG

SEO ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCCAGG CTGGTCTTGA ACTCCTATTC TCAAGAGAGC CTCCTGCCTC AGCCTTGTAA AGCACTGGGA
TTATAGGCAT GAACCACCGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATTG TTTCAGGATT
TTGCTACAAT ATACAAAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CCTGCCTGAT TAGTTCAGTG CACATACAAC
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAAACT GAGCTGTTTT CCTTATTTGT AAAGACTAAG
ATCGCGTATG TCAAAGAGCT CTGTAAACTC TCAACACATA CAAAGTACTA CTGCTG

SEO ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCCTC
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCCTACG TAGAAAGGCC CCGGGGGCTT ATTTTAGTCT CCTTTTCAGG
GATGTCGTGG GCGGGGAGG GGGTTCTTGG TGCTACAGCC CTCTCCCCAC CCCTAAAGGG ACGCCGACGC TGTTTGCTGC
CTTCACCACA TATTAGTGCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGGAAGAG CAAAATACAT GGAGACGACG
CACCCTNCAG GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTCC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTTGCC TATTGAGCAT TGTGGATGAT GTGTTTTCAG
ATTTCCAGGT GAAGTTCTGA CCCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAGG CCTTGGTCTT CCTGATCAAC
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTTG
GATGCCTTTT TCCTAGACCA GGAAT

SEO ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA
AATTCAACGC CCTCCTATCG AAAATGGACA GATCCAGCAG GCAGAAAATT AGTAAGGACA TTGTTGAGCT CTGCAATACC
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACAACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA
ACATTCACAA AGATAGACCA CACGCAGGCC CATAAAGCAC ACCTTAACAA ATTTAAAATA ATATAAATCA TACAGTGTGC
TCTCAAACCC NCAGTGG

SEO ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGIAAA CINTITICIG AGAAGCATGC TIAGGITGIG GGACAGGAAG TGGIAAAGGC AATGCATCGI CCACAGAGGI GGATGAAGCA GINACAAAGG AATGATAATT INANCIGCIG GIGGCATCIN CACIGCIGGA GIGIATGGCA GCAATCATCI TACICICCAT CATCCIGGIG GGGGCAGIN GIGCAGGAAA GCCACAGGGA TICGCA

SEO ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCIATGA AAATACAAAA AACATTAGCA CATTCATAGT ATGIATGTGI CTACAGGCAT TINCCCAGCC CTATGAGAGT NCIGCAATTI GAGAAGTACT AAAATGIATT GITTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGITG TGGCAAAGCA GICTATTTCC ACTGCAATTI CTGCIACTAT TAGCITAAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT ATNCIGCTGA GATCIAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

SEO ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTENEGECTE CCICTCGITE GICAAATCCA ACCAAAAGCT AAGAGCIEGA GAGCITEGGI GGIGCATCCA AGGAGGCITE CITCCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GIGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACITTA TGICACCTCI GGIGCTTGAA GGCCTTTCIC CAGGGAGACA AAAAGITTGI NITGGCTAAA GCTCCCTGGI TGCTCAGGAG CCAAGGGTCA CATAATGIGC CAATGGGGGT TITTGCCTCT GAAAGCCTCT GAGGTATAAT TACTIGCAAT GNNAACATCC CTTTTCTCTC TCTTCCTCTG CCCACCTTCC ATGCCAAGG

SEO ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGCC GGCCTGGGCA ACATAGACAC CATCTCTITA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA
AAGACTAATT AGAAGTGAAA AATACCACTG AAATGITGGT GTACAAATGG CAGCATAATT TGATTTACAC TAGATTITAC
ACATTTGTGT CTATTTCAAA TAGGTACTTT TACATTTTCC TTAACTGCAT CTGACACAGA GTGAATCACA GATATATGTT
GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTTACAGAT
TGTG

SEO ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGITIATA AAGCITTATT AAACATITCA AACAGCIGIG CAACGAACAC ACCAAATAAA AGCICTAGAA TAGCAGICCA
GACGITTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGINCIGI NCTCTGCCTG GCCCATCTCT
CTTTCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG
AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT
TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEO ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTT AAATTAAGAC TGCCTTAGTG AGAAAATTTC AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA
GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC
CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGGAATTINC ATGCATCTTT TAAATTTTTG GTTTATTTTT
NCAAGAAATA AATGAAGTCT TTATTTTTNC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT
GGTTTCTAAT CTTGGTTCAT CTCCCCCACT GATCTTGAGT TTTAAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC
ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAC ACAAAGGCT CCTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCT ATGGCCTCCT
TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTAAG CAGTGACTGC TCACAGCGAG TGCATTCCTG GNTCCCCAAC
TCCATGAGGG CATAGCAGGC GGTCACCACA TCCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACTTCCAC
GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTTGCTCCCG GAGCTGCCCG CCGGGATCCA GTCGGAGCCG CAGGTG

SEO ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTITATOT GIAGACAGGC TGIGGGITCC CCTCACTIAA ATIGAAGCTC TGITGAACTI GAGACACTIA AGANICITGC
AAGINIGAAA AGIGGAGIGA AACAAAACCA TITCTAAAAC GAAAATGIGI AACINCNITC AGITITACAC AGICAIAGAAA
TAAGIATAAA ACAAGITAGI CICAAACGGI TATATCITAA GGICAITITA TICCIGITAT CATTAACTAG ACATATCITG
GITTAGAGAG CAGCACACA GACATTGIGI ACINTITAAT AGCTAA

SEO ID NO:2316: (Length of Sequence = 414 Nucleotides)

AATCATAGCT TACTGTGGCC TCGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG
GTGCGTGCCA CCACACCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTTGTTG CCCAGGCTGG TGTCAGACTC
CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTCGGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT
TTTTGTATTT CTTACTTAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTTCTGTC
ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGCAGGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT
NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTGACTA TIATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTIGINATT TITNATCAAG AAATAGGGCT
GTITTATACT GTTATTGACA TCAACTTTTT CCCAGTGCAT TTTTCAAAAA TATTAATAAG TTCATTCCTT TGTGCTTTTA
ACTITCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TITATITIAC ACTIACAAAA GAAATGECCC ACCCCTTIGC CCCATTCCCC CAAAACAGTC TCTTTTTACA AACATTTAAA
AATTAAAACC AAATGAAGAT AGACAAGTTA ATTTCAGTAC AATTATTTIN CAGTGTAGCT GICATAATTA GAGTTTAAAT
TTCCTACAAG TGACCAATGT CCAAGTGACT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATTCAATA TTACAAGTTA
GCAAATTCTT AGTACAAAAA TAGTCCGTGT GTTGGAACAG CTTTTCCTTG TTACATAGGT CTTAGGTCAG TCTGCTGTNA
ATACCTTAAC GNITCCGGAT TCTNNTCTCA CAAATG C AAATG C AAATG C CTG

SEO ID NO:2319: (Length of Sequence = 380 Nucleotides)

CATCITAGIT CATGGIAATC TCCITGGCAG CACTIATIGI CTITGIGIGA GAGCAAATGA TAGAGICATC CATICAAGIT
AATTAAGAGC ATCIGCATIG CAAAACIGGT CACTAAATIG CTCGCCAAAT TIGAGGCTIT TITCCTGCCA ACACAAATTA
ATTITITAAG TAGCAGCATT TICAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGITGC CTGICTAGIG AGATGICCCC
AAACTACAA CTITAAACAT ACCITTGCCT TINATAGITAG TICTTCACAC AAACTGCCTT AATCAAAATG CGIGICTCTT
GCTCTGICAT TITATGITTT GGCTCTITAG CAACCTAATT GIATGGITAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GEAGITCTCT TGTCCACGGA GAGCAGTGTT GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAAAATCCT AAAAGCACGA
TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGGTACT ATGAAGTTAC TTCCTCCAAC ATTAGTGCAA
ACACAAAGTA NGAAGGTGGT GCCACACT

SEO ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTICCCT GCATCTGCCA CCGTAGTITC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TICINCCCTA
GAAGGGGACA CTGGTAACAT GTCCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTINCNT CTTTTGCCCA
CCCCCCTGGC ATTCAGCTGG ACCCAACTAG GCCATCATGA GTGGCTTCTC CCTGTCATCC CCAGGGGTCA TAGGATATCT
ACACCGCCTT TNTGACCCCA CCCTGCACTC CCATCCTTTC CTCTCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC
GGGATGCTTN

SEO ID NO:2322: (Length of Sequence = 352 Nucleotides)

TTGACAGTA AGTGTATATA TITAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG
TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGCGAGA ATCCTGAAAA TCAACTCTGA
GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTTA ATCAGATTGC CTACCTTGGT TAAAGTGCAG
ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTTGCTA
ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEO ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGI CICTCICIGI CGCCCGGGCI GGAGIGCAGI GGCACAACIC AGCICACTGC AACCICCGCC TCCCAGATGI
CCAAGIGATC AAGGGGITTC ATTIGCICIT GGGGGATTAG GIATCATTIG GGGAGGAAGC ATGIGITCIG TGAGGITGIT
CGGCTATGIC CAAGIGICGI TIACIAATAG TGGAGACGGG GITTCACCAT GITGGCCAGG CAGGACCICA GGIGATCTGC
CCACCICAGC CTCCCGAAGI GCIGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATITICTITA TCCATG

SEO ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGGACAGGA GGTGACCTCG CGAGCAGACG CGCGCNCCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CCGTGGGGCA
GAGGCTGCGG ANCCCAGGAG GGCCGGAGCC CTCATGANIT CANTNACCTG CTTCTCCCCC TNTAGGTCTA TCAGCCACAG
TNTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC
ACCCAGGAG AGTGGCAGCA ACTGGACCT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CIGICICAAA TAATAATGAT AATATTINCT TAIGCTTACT TIACIGIAAG ATTACAGIAT ACATTACAAC ATAIGCGITT ATTGACTGIT TAIGTTATIG ATAAGGCTIC TAGICAACAG TAGGITACTA GTAATTAAGT TITIGAGGAG TCAAAAGITA TGIGIGGATI TICAACIGIG GACTITGGIG CCICIAACCC TGIGITGITC AGGGGICAAC TGIGITATICT TICIGIGGNA ACATTITITAG ATGITATAGC CITTAGACAT TAGAAATGGA AATTTAGTIG AACTCGNGIG TIC

<u>SEO ID NO:2326:</u> (Length of Sequence = 348 Nucleotides)

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCIGITITI TCCTAGCTGC CAAGACTGIT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTIT CIGIGGATGI TCCTCATCTG AAATTITGAG AATGGAGGA ATTATTCTGG ATAAGITGAA TTGGGATCTT CACACAGCCA CACCATTGGA TITTCTTCAT ATTITCCATG CCATTGCAGT GTCAACTAGG CCTCAGTTAC TITTCAGTTT GCCCAAATTG AGCCCATCTC AACATTTGGC AGTCCTTACC ANGCAACTAC TTCACTGTAT GGCCTGCAAC CAACTTCTGC AATTCAGAGG ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEO ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTNCTTTTC TGTTGGGAAA AAAAAAAAAC AAATCCTCCA AACCACACG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNNAGAT CACAGNCCTT CTCCTT

SEO ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGIAGAGACA GCATTICATT ATGITGGCCA GGCTGGTCTC GAACTCCTCA CCTCAAGTGA TCTGCCTGCC TCGCCTCCC
AAAGTGCGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTT TTTTTTTTTAA CGAAGTTATT TTTCTAGAGC
ATTCATAGTT TGTTTTATA CAGITAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG
CCNCTGTTT TTTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT
TAAACTATTG AACTTTCACA TCAAAATTTT GGAACTACAA AGIAGGTTTA ACAAGGTGAG AAC

SEO ID NO:2330: (Length of Sequence = 392 Nucleotides)

CEAAACENIC TCAACCIATT CTCAAACIIT AAATGGGIAA GAAGCCCACT GGTCAGCATG GCAAAGCCCC AGCICTAATA
AAAAATGCAA AAAATGGCT GGGAGTGGAG GCGGCGCCCT GTAATCCCAG CTACITGGAA GGTTGAGCTG GGGAGTTGC
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT
CTCAAAAAAA AAAAAAANI TATGCAAAGT GTCTTTTCCA ACAAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC
CTGGGAGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCAGTG GCTCAAAGGA GGAAATGACT GG

SEO ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGIA AATTCATCTT GCTCACAGIC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC
AGAACGAGCT GTTCCTTCTT TTGACACGCA CAAGCTAATC CCCTAGAGGA TGGGGATGTG GGAAACGGAG GGTAATTAAT
TCTTTGGTCA CTGGTCACT GCTGAATAGC CTTGGTCAGT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGTT
TCTTTTTTTT AAAAAATAAA ATGTTCGCAC AATGGGAGAA AATT

SEO ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCITAAAAA GATTITIGI ATTINCITIT GAGACIGGGI CICAGICTGI TGCCCAGGCI GGAGIGIAGC AGCCTGATCA
TGGCTCAGIG CAGCCTCTAC CICCCCGGGC TCAGGIGATC CICCCCCTTC AGCCICCTGA GIAGCTGGGA CIACAGAGGI
GIGGCACCAT GCCCGGCTAA TITTIGIATT TITTIGIGGAG ATGGGGTTTT GCCATGITGC CCAGGCTAGT CITGAACICC
TGGATGIGAG CCACTGCGIC TGGCCTATTA TITTIAAATAT AGTTCTCTTT ACTGCCAGIA GCTTTCATAT AACCCTAGCG
ACTAGATTTA GTCACCACTG CTTAATTCC

SEO ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCICICC GITCICIGCT TCINAACCAC AGCOGCATCC TATTIGCAGC CCICAAGAIT AAGGAIGAAA ATTIGACIIT TIAATITIAT TATTCIIGIT CITCCIICCI ACTICAITAG AAICAIGITA TIGGCCIAAA AIACIGIAIG TAAAGGAIGC TCIGGGGCCC ATCIGGAAGC CIGCATICIC TGGGGAIATA ATTACGCIAA GCAATITITC ACCAGGGACA GCATGACITA GCITCIACCI GGGCATCCIC TGGCAACACA GCCCICAGIT CITCCAAAGG GATTGGCTGC TGTCCCITCA GGCCITCIIC TIGNGIGIGI GIGIGIGIGIG TIC

SEO ID NO:2334: (Length of Sequence = 279 Nucleotides)

GOGCCTTCTA CNAGCIGCTG CIGCCGCNCT CAINCIGGIG GOGATGCTGC AGCTGCTCTA CCTGTCGCTG CIGTCCGGAC
TGCACGGCCA GGAGGAGCAA GACCAATATT TIAAGTTCTT TCCCCCGTCC CCACGGTCCG TGGACCAGGT CAAGGCCCAG
TCCGNACCGC GCTGGCCTCT GGAGGCGTCC TNGACGCTAG CGGCGATTAC CGCNTCTACA GGGGCCTGCT GAAGACCACC
ATNGACCCCA ACNATGTGAT CCTGGCCACG NACGCCAGC

SEO ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGGTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCCAG

GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCCAGAAG CCCAGGTAGA CTTCCTCTTC AATTTCATTG

GCCACACCTG ATCACATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTACAGC CTCCACAGTT

GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCTGCA CGGCTGCCCT GGAGGGCGTG

GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTTGCC TCCATGGAGC ACCTCT

SEO ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCCTGGNA GGGGCCAGCC TGTCGGTGCT CTGGGCCTTG CAGCINTTC TNTAGGGTTA

GCGGTGGTGC CGGGGTCACT TTCTGAATCT TTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA

ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC

AGTGAGGAAC GGTGCCGG

SEO ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTC CCACTCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCCA ATAAAAAAAT CCCACAACTT

TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAAAAATCT ATAGCCCAAA

TCACCAAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTTGGNCA TCAAAATGGA GCTTTCAGAC

ACTAATCAAG GCCATTAATT AAAAAAATTT TTTCAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCCACTT CATAAAAGCA

AAATATGTGG CAGACTCT

SEO ID NO:2338: (Length of Sequence = 410 Nucleotides)

GEGICITECT ATECTECCTA GECTEGICTT GAACTCITCA ACTECAGICI TGACCICCCA GECTCAAGIG ATCTTCITAC

ATAGGCCTCC CAATGIGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGIA TTCITAATTC AGCTCACAAT

GTGCCCTCAT CAGATTGCIA GTGGCCAGGA GTGAACAACT GAGTGACTIT AAGAATCAGG ACACCAGGAA TATGITCCTA

GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAGGCCC ACATGIGTGC CAGAGTGGCC AGGGCAGGGA

GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA

AGTAGATAAG

SEO ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGCCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT

TINITGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT

CCTGCAGGCC CTCCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG

CCTGCNTGAA GCAGGCCATT NAGGNGCAGC TTCAGCTGGA GCGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA

GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGTT TCTCCTTGTT GGTCAGGCTG GTCTCGAACT CCCGACCTCA GGTGATCCAC CTGCCTCGGC

CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGCGNC CGGCCTTCAG TTTCTTCCTA GGCCGTTCTG TCACCCAAAT

AGCTGCTACC CAGAGNGGCG GGGTTGACCT AGGCTGAATA TCCACTTTGT TTTTATGGAT GGCTNCCTTC CCCCATTCGN

CTTTNCCAGA ATATCCTTTC AAGTTNCANT TTCCCAGGGG AGCTCTTGGG

SEO ID NO:2341: (Length of Sequence = 298 Nucleotides)

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TTTTGCTTAT TACCCGATIT ATTAGAGAGA TCTCTAAAAA GACGGGGTG GGCGGGGGTA GGTGGGCCAG GAACCTGGGA
TGCAAACCAG TGTTTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTTTGAGGG ACACAGCACC
CTCGTCTCGG CGCTTTGGAT TNTCACGCAC CAGACCACCG GGCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC
ACACGAGGTT TGCAGTTTCA TTTTGTTTCA GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTUAACAAG GTOGTGGTGG TGTGGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCCA
TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAATGAAA TTGAGACAGA GGCCATCCTG
TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNCAT
CGTGGGGCTTC CCTGGNCGTT ACCACGCATG CGACATCCCC CATCAGTCCT GGNTCTACAA CTCCAACTAC TCCTGT

SEO ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGAG GAAGGTIGGA CCITCATCAG ACCACICCCT TCCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA
TCTACCCACT TACTAACCTG GTCCTAACCC CCTTACTGTG CGCGTGTGTG TGCGTGTGCG CACGCTCTGG CTGTTTGTCT
ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGGATGG GGGTCAGGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT
AGGAGGAGGT GGGGGCTATT TCTATGCAAA TAGAAATCAG CACATTCCTC CTACTTCCCT TTCCTCCACT CCCCCCATAT
CTTTAAAGTG TGGAAGCAGA AAAGGACCTG CATTTTTCCT ACAATTGAGG AGCTGACATA

SEO ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TIATGCAAAT TITATTGAAA TITATTGIAA ATAAAGMITI TONCAGIGGN CIAGAAAANC AGCITGAATG
NCATTCAGCA TITATTGAAG AAGGATGACA TCCCINCCAC TIATTGCACA AACITGGIAG CITTGAGACA AATACAGIAG
CACAGICCGI TIGAAGATIT GICCAAAAAA TIAGTCCATA TITTAGTGGC TCAGTGTCAA GNGITCCCIC CCTGTGCCCC
CACTGTTGCT TCTGCAGTGA TACGAAGGAT GAATGCTTAA TT

SEO ID.NO:2345: (Length of Sequence = 256 Nucleotides)

CTTIATAGGA AGCIGCAAAA GAAATGAGCA GAGCGNGATA TITGIGGIAA GGGATACAAA GAACATACAA TIGIGIACIT GAGAGGITTC ATGGAACATT ATGACCCATC CAATGAGAC ATCAACATTA ACAACAAAAA TIAMITGAGG AAGAGCAGIA TGAAAATATT CTAATGCAGT GCIGICCAAC AGAACTITCT GIGGIGATGG AAATGITCCA TATCTTTGIG CTAATACAGA ATCIACCAGC CACATG

SEO ID NO:2346: (Length of Sequence = 437 Nucleotides)

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGGCCGCC GCTTTCCGCC GGGGCGAGAC CCCCAGGTTC AAAATGAGCC TGTTTGGAAC AACCTCAGGT TTTGGAACCA GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCCTGAT GATAGCATTG GTTGTCTGTC TTTTAGCCCCA CCAACCTTGC CGGGGAACTT TCTTATTGCA GGATCATGGG CTAATGATGT

TOGOTGOTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT GCTGGAGTTA CGATGGGAGC AAAGTGTTTA CGGCATCGTG TGATAAAACT GCCAAAAATGT GGGGACCTCA GCAGTAACCA AGCGAT

SEO ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCGG ANTICGCCGA CCGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCCTGC TGGTGAACCA
GCACAGCATG GTGAGINTNT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEO ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCICCTACT GATGICITIC AGTAGATICA GAAGIGATIG TGGCAAACAT AGTATCITGA AGGAAGAGAT CGIGITTIGA
TTAGCATCIC CCGAGCCIAG TITIGIGITI ATGITCATGG TATTGAGGAA ATAAAGATCA ATTTGGACIT CTTGCACCIG
TTAATACATC CTAGITCCIG ACIGCAGCAA AATGACTCIC AGTGCCCCIT TCTCITCITA GIGATTGCCT AAGATGACAG
CTTCATTCCC TITIAATTAT TATCCACCIT CITCCCCATC TTCANITGIT TTCTCAAGIG AGGGACTTGG CCTCTACTGG
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT CAAGCAATTC TCCTGCCTCA GCCTCCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGCCCAAT TTTTTGTACT TTTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAACTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC CAAAGTGCCG GGACCACAGG CATGAGNCAC CGCACCCAGA AAAAGCAAAT CTCTTAGTAT TTTTCCTCTT GTCCAAAAGG TTCTGACCAT GTTCATGAC

<u>SEO ID NO:2351:</u> (Length of Sequence = 354 Nucleotides)

AGAAGGACCI GAGITGIGGC CAACAACAGG CIGCAGAAAG GCAATGCCAT CCTGAAGAIT TCTCAACTAA GAGICTGCAC CCATGACAGC CCACCGAGAC CCTCGCTCCA AGITTGIGGA GAAAGGGAAC CCGCTTGGCA GCATGIGGAA AGACCCCACG ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC TGTATGAGAC AGCAACAGCC AGAACAGCA GCTTTACGTT GATGAACACA CAGACGGIGG CGCATGTTCA GAGATGCCGA GGGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEO ID NO:2352: (Length of Sequence = 378 Nucleotides)

SEO ID NO:2353: (Length of Sequence = 369 Nucleotides)

CIGCCITATA TAATGIGGAT GCIGGGCACA GAGCIGTCAT CITIGACCGA TICCGIGGAG TGCAGGACAT TGIGGIAGGG GAAGGGACIC ATTITCICAT CCCGIGGGIA CAGAAACCAA TTATCITIGA CIGCCGITCI CGACCACGIA ATGIGCCAGT CATCATTEGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCTTCCGGCC TGTCGCCAGC CAGCTTCCTC
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACTG AGATCCTCAA GTCAGTGGTG
GCTCGCTTTG ATINCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEO ID NO:2354: (Length of Sequence = 363 Nucleotides)

GEAGAGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAACCATT
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCINAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCTGT
CATGCCTCTG CTCACCATGC TGTTGCGGTT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCCTGAG GAAGACGGGG
GTTNCCCATT TNAACTGGTA GTCCAGATGA GGGAGGGAGG

SEO ID NO:2355: (Length of Sequence = 403 Nucleotides)

SEO ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACTGTTAC CITGAGCCTG AGAAGCCAAT TCAGATTCAA CCCTGAATTT
GGTTGATTTG GATTAAGTGA CGCAAAAAGT CAATAGAACC ATTGANTTC AGAAATCATA AAGTTGCACT ATGCCAAAGA
AAAGAGTACA TGTGAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANIT CACATAATTT INTITGCCCC
GACAAAAACAT TTAAGCAGIT AATTTTGTTT TGTTTTGTTT TGTTTGTTTT TGAAGAACAN TTGTGGTCTT TTACATTTTC
TTGGTGGGAG AGCAAATTCT GATCAGCATT AGTGCTGTGA AATACTTTTG GNTTATCATC CCCCAAGTNI AGGGTGAGAT
CATGAGGAAA NTTTTGGCAG TCCTTCTCC AGATTNGTT CACTNAAANT GCTTGG

SEO ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCAACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTC TTATGCCCTG CCCCCTTCCC CCAAAAAAACC
ACCTGCAGAA CCAAATGTTT CTCCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTC AAAAAGGNTA ATAAAGGTGC TCGTACTTGT
ATCTTCTTCC CT

SEO ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGCCAC AGGITCAAGI GGGGCCCCTI GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGIT TICCACATAT
GGCGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT
CCCCCCCCAG GAAATTGCCC CAGATGCCTC CTTCATCGAT GACGAAGCAT TTAAGCCGCT GCAGGGCAAG AGGAACCGAG
GGAGAGAGAAA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGI GGGGCCCAGC AATGGATGAC TAAGTCATTG
ACAGAAGAGA AAACCATGAA GTCATTCAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGCGG AAACACCAG

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SEO ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA
GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT
TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC
AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC
ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEO ID NO:2360: (Length of Sequence = 359 Nucleotides)

TITITITCAG CATAGICAIC TIAGCITIAT TGAGIAAGGC ATCCCAATCI CIGCIAAGAT TCINCIAAAT GAACGGCIGA
TITITCCIGCC AAACTAIGCA TIGGICAAAG AGAAATCACC ACCIGGCCAC CCCATICIGI CCCCCIACAG GACACTAAGG
GITCITACAG ATAAAGGGAC GATGCATICA TGCCIGGAGA ACTAATCACA CCIGATITCI CIGGGATCIA AANIAATGIC
AAATITIGAT TCACTITAIG TAAAGAAAAA TCCITITINIT TIINIGCAAA CCNCTITCAA GANCAATGCI GCCCATCCCA
TGCAAGATGI TGTIGTAAGG CCANCNICIG GIATACTAA

SEO ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT
GTATGGCCTG GCAACTAAAA AATGTTTTTT ACATTTTTAA ATGGTTAACA AAATTAAAAT AAGAGAATAT TTCATGACAT
CATCAAATTA CACGAAATGC AAATTTCAGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCCTCAT CCGTTTGCAG
GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG
TCCCCAAACA CTAAATCTGA AATGTTTTGC ATCAGAACCC CTTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCCACA
NCCAGTCTCT GGATTCAGTA AGTCTGGAGC AGGGCCT

SEO ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCCTGGG CTTGGACTGG CTAGAATCIT TCTCTGGACT NTTGCATGTA CAGTGNCTCC ATCCTGGAGG CAAGAGAGIT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCIN CTGTTGCATC GTTTGAAGCT GACGTCCTGT GTCTNTACAC TGCTGCCACT GTTGTNTCCT CGNTCTGCTT GCTGTTGCCT CACGCCAGGN CCCGTCCTGC CGTGACANCC TTCATCCTAC CCTTGGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAACA

SEO ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINI TGATAGITCI ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA
AATAATATAG ATTAGGAATC ATCGTTACCT CCAAACAGIT AATTCAATTC AAATTTTTAG CCCAGACTGG TTTTTAAAGA
CATTTTCTGC CAAAATTTTT TGGAAGTAAA CACATTAAGG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTATACTC
ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGI ATACTTATAA ATGTCTGGTT TTAGAAACAC
TAAAAGATCT CCCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCCTGAACT AGTGGCTAAC CTGTNTAGGC
ATCTCACGAG GG

SEO ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGIN CCTCGAGACA TITATTTAAG CTAATCTGTC CTTGATTTTT GACTITCAGA
TICATTACAC CCAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG
CCTTGTTCAC TACTCTATCC TCAGCTTGGT ATTTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT
GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCINGATA AGGTTCTAGA
GAGGGGAGGT TCTA

SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TITAATAAGT ACITTATIGA TATTATATCA CACAGCACTI TACAGTATAC TCAAAGATAG CCTAAATTAT
GAATTAAACA TGCAAATATT TNCTTTTCCA AAATGIGGAC AAAATGICTI TITAGAGGCT TTTGAACACT AGCCTTAGCT
ACTAAGCATT CATGGGTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAAA TGTAGCTGTA GACAGTAATT
GTTTGATAAA TATGANCAGT TTTAAAAATGG CACTGAATTT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC
TTGTGGTCTCT AATTCTCAAC CTCCGGGGTC TTTAAAGGGC TCGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT
CTGTAAGGNG TCTATGTCTT CAT

SEO ID NO:2366: (Length of Sequence = 294 Mucleotides)

SEO ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGTCTGACTT CCACGTTTTC GTCAGGGATG TGTTGCAGCA TGTGGATTCC
ATGCAGAAAG ACTACCCTGG GCTTCCTGTC TTCCTTCTGG GCCACTCCAT GGGAGGGGCC ATGGCCATCC TCAGGGCGCC
AGAGAGGCCC GGCCACTTCG CCGCCATGGT ACTCATTTCG CCTCTGGTTC TTGCCCAATCC TGAATCTGCA ACAACTTTCA
AGGTCCTTGC TGCGAAAGTG CTCAACCTTG TGCTGCCAAA CTTNTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG
AATAAGGACA GAGGTCGACA TTTATAACTC AGACCCCCTG ATCTINCCGG GGCANGGGCT NAAGGTGTGC TTT

<u>SEO ID NO:2368:</u> (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACCAGT GITAGAAGIT TTGGTGGGGA AGACAATINA GCAGTCTCTT CTGGANGTAA TGGAAGAAGA AGAGCTGGCT AACCTGCGGG CCAGTCAGCG TGAGTATGAA GAACTACCGA ATAGTGAACG TCCTGAAGIT CAACGACTTG NAGAGCAAGA NAGGCGACAC CCAGAAG

SEO ID NO:2369: (Length of Sequence = 341 Nucleotides)

GIATCITIAG TAGAGGCGG GITCCACCAT GITGGCCAGG CIGGICTCGI ACTCCIGACC TCAGGIGATC ACCIGCCTCC
TCGGCCTCCC AAAATGCIGG GATTACAAGC GIGAGCCACC GCGCCIGGCA CCATCAGITT TIGATCCIGA TACITGTCIG
TCCTCTTGGT TCTCCTCATC CCTAATTTAA CCTTGAACAC AAAATTCAAC AGGITTIGGC ATATAGAATA AAGATTATCA
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCCTGA TCTATCAGCA ATATTTAATT TGTCTAGAAA
TGATGAGAAG TTTAGAGGAG G

SEO ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAAA ATGCCAGTAT GCAAAGGACA CTTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG
CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTTCTGTTCT ATTGAAGATG CCTATGCTCA
GGAAAGGGAT GCCTTTGAGT CCCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT
TGGAAACTAG TAAGAGGAAA TCCCTACAGT TACTNGACTA AAGATTCAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA
CAACACACAC

SEO ID NO:2371: (Length of Sequence = 320 Nucleotides)

CETEGCOGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCCT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG
TGGATTGATC TGCTCAGGGG CACAGGGAGA TGGCACAGCA GGACCCGCCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GCNTGGGACT GGAGGCCCAG GTGAATCTTG
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCCCGGCCC TTCCCACCCA AAGGCCCTAG AACCCTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TGCGGCGAAA AGTTCCTGGA GAAGGCCTCC CCCTCCCCAA AACACCCGAG AAACGTGGGG ACCTCATTAT
TGAGTTTGAA GTGATCTTCC CCGAAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCTTCCA ATATAGCTAT
CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTC TGGACCTTTC TACCAGTTGT GGACCATGAG
AGGGTGGGAG GGCCCAGGGA GGGCTTTCGT ACINCTGAAT GTTTINCAGA GCATATATTA CAATCTTTCA AAGTCGCACA
CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA
TGTCACTGTG GTTGINICTC AGAGCCCGCA CGGCCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCAATGTCA
CGCAGTTCCA GCCCCGCCTC GTCCACCTCT TCCTCCTCCT CCTCTTCCTC TTCCTTGCAC TCCAGCCTCA CCCGGGGCCT
GGGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGGA ACCTTAAACT TCTCAGCTGC GGCTTTGTGC ACTTGCTGGG
ACAAGGTCCT CAATCTTGGN CTCGCCCAAAG ACCACATAAG T

SEO ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGCCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATCGACAATC
TAACTTCCGT AGAGGAGAC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGGNTCCC
AAAAAGGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TTTATAAAGG
AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEO ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGITTAGIG CITCCITCAG GAGCICIGGI AGGGCAGGIC TGGIGGIGAC AAAATCICIC AGCATITGCI TGICIGIAAA GGATTITATI TCICCITCAC THATGAAGCI CAGITTIGGCI GGATATGAAA TTCIGGGIIG AAAATTCITI TCITTAAGAA TGITGAATAT TGGCCCCCAC TCICTICIGG CITGIACAGI TTCIGCTGAA AGATCIGCIG TTAGICIGAI GGGCTTCCCI TTGIGAGIAA CCCGACCITT CICTCIGGCI GCCCTTAACA TTTTINCCII CATTICAACT TTGGIGAATC TGACAATTGI GTATCITGGA GTTGCTGTIC TCGAGGAGGC AACCTTTGIG GGCGITCTCT GTAATTTCCC CGAATTIGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGGN TCTGCACAAG GGGGGCCTGC CCCCTGGCCC CAGCTATATA CACGACAGCC CATCCTGCTG GCCGTGGACA AAAGCTGGGA GCTCCTGTGC CCAGTCAGGA GCCCCTACAG TCCACCAGCT GCGCGGCCGG GTCCAGGGGC CCACTGTGGT GCCAGCNAGT TTNTCAAAAC CNAGGGCCCA GCCCCAGCTG GCNCCTNGCC AAGCCCCAGG CCTGTTTGCT GGGATGGAGC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG CAAT

SEO ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTT TTATTTATGT ATTTTAACTG ACTTATTTGT GTATCCCACT AGAACAATAC ATTCACAATA TACTTGCAGA ACTGTGCCTG GTGCGTCATG GGAGCAGAGA ACTTGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAAATC TCCCCCAAAC

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CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG GGAGGAAGCC CTCCGGTCTT TCCGAGGAAC CTTCAAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGICIT TCAATAGCAA GITTCACIT CATCGACAAC ATCACGAAGG TGGIAACAAA CAAATGCITI ATCAGGCTGG
ACTICATITC AAACTCCCCC AAAGCACAGA TCCATTACGC ACATTIAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACTGTTGC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEO ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGINA TIAAANGIGI ATITINIGGA CCIGGGCTIG GCIGGAATGC TCAGGGGICC TGAAGATCCI ATIAIAGCII CCITCIGIIG AACCATIAAG AAAAGATGGC GANAGICAAC ATAACTAGAG ACCICATCCG TAGNAGATCA AGGAGGGGGG TGCCCITAGC TIINAGCGGC GCIACCATGI CACTGINCCC TIITATCCGGC GGCT

SEO ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGITTGAAA TATCITTITG CAATAGATAA TCITATITAC AITAATACAG AATCATITIA CATTCCTAAA TCAGACACTA
ATAGATGCIT TATTITAGIG AATTATAAAG GAAAACAAAA AGGAAACIGI TGAGAAGIGI TCITCATTAA CCNGICIAAC
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGIT CTGCTCTCAC
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CIGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTITATITGA TGANCCACAG TGACTAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG
GGAGGTAAGG GGGTATCACA GCAGGCAGCC TCCTCTGNIT CINTCCCAGT TCACAGATGA GITCCAGGCA GGAAGTCTCT
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINITCC CITCTAGAAG CCINTTCCAG TGTTCACTGG ATGNITTGAG
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEO ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTTGAG TTTTGAAAAA TCTTATTTGT TGCTGCACAG
GTTAATAAAT TATCAATTTG TAATTCAGCA TGTTGGTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC
CGTCTCAGAC ACGCACAGTG GGCCTGCTGC ATGATTCACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG
GCCTGCTGCA TGCGTGTTAC CTGGCTTTTG GCTCCACGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA
TCACTCACAT ATGTACATGT ACCCACCACA AAOGTGCAAA GCTCCTTGCA CACATGCATG CACACAAAACG TGGTACACAA
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCTTTC ACTIAGCCCT CITGGGTTG CAACATGCTT TCTCTCTCAC CITCTCATTG AATGAGAAAA AACAGCCCAG CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGACT TTCACAGTAA CTCAGTTTGA TGTAGGCAGT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTCACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

CCAGACTICA TGTGAAGGIG GCTGCTTCTG GGGTGATGGI GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT
TCAGAT

SEO ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCCTGATCC
TTGTGGACGA ATGTNCCCGG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGGCTCGGGA
AAGGC

SEO ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGITTINATI CATICICITC TATTAACCIC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTITGGG AGGCTGAGGT
GGGTGGGTCA CITINAGGIC AGGAGTICAA GACCAACCIG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA
NITAGCCAGG CTGGTGGTGT TCGCCTGTAA TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GIGAATTIAT TGGITCATGI AACTGGAAAG TCTCATGAAA ATGTCAGCIT CAGGAGAAGC TTGACCCAGC
AGCITCATGA TGTATGGAAA TACCTGGGIT TITTGITTCI NCTCTGCTAC TGTGGTATCA GCTTTATTCC AAGTCTGGCT
TCCTTTGITG TTGCAAAATG CTTTGTCAGA AGAAGCCTGG GTCCATCTGI TAGGNTTAAG TTTACTCTGT ATGCTGTAGT
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCCTCCC ATATTAAAAG

SEO ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TIGTCACATG AAATGCACAT CCAAAACGGG TGACTTGGAA ACGACCTATT AGGTCACACG GAGTCCGGCC CCTGGGGGCA AAGCCTCATC GATGCCCACG GGCGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCCTCCC CAGCGGAGAG TCAGCTCACA CCCCAGGCCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT CCTTGGGGGT TAATAGCTGT TCCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT TTAGGCCAAGA AGCTTTTCTA TAGGGCTTTG TCAGAG

SEO ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAAACTTA AGACGCCATT AGAATTCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAAA GAATGCCCGA CCCTGAACCA GACCTAAAGC ACCTTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG GACACCAGGA CAGTGAGGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTIGENATG GCINCAGTGA GGAGAAATCC CGGGAACTGT ATTGACACAA AGATTCTNAT TGCACTTGTA
TTTTTINIATT AAAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG
GGCTTCTCTN GAAGGGGGAT TGNGCTGCAN TGTAGATTTN CCTCTGAAGG AGGCTGGCCC CAAACTTGGN CCTCCTCATG
ACCCCCTCCT

SEO ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGG TCTCGCTATA TTGCCCAGGC AGGTCTCGAA CTCCTGGGCT CAAGCTATCC TCCCGCCTCT
NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCNT TTCATCAGTT GCAGTTAAGA TTTTNNVTTC TTGAAATACT
GGTTTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCCAAGGC CAGCTCCAGG ACATTCTGAC

TOCATAGGIA TGIGGIAAGC CCAGGGAATC CAGGIAAGCT CAGGIAAGCC CAGGGAATTG TIAACAGGAA GCIGGIGGGT TICIGGCACC TMGACANCGA CIGAATTCTA GGIAGCTIGC C

SEO ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTICAGCA GECTATGAAA TITGITGGGC ATATAAANAA CIGGAACITI CAACAGGGIG GITTIGAAAC TAGNGCATTA ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGIGIC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN CCAGTICTCTG AGITAGCACC TITCCACGNT AGICTCTTAC

SEO ID NO:2392: (Length of Sequence = 234 Nucleotides)

TOCCTGAGGI GITTGGITTG GAATAGGGAA AAAGGIAAGA GACTAACGIG GAAAGGIGCI AACTCAGAGA CIGGAGATTA
TAGITTACAG CIGIACTITC CAGATCITCI AIGIGACACA AIGCACTGIC CITGIGGGIT TGICAITTAT TGGITAATNC
TCIAGITTCA AAACCACCCI GITGAAAGIT CCAGNIAITT ATATGCCCAA CAAATTTCAT AGCCIGCTGA ACTG

SEO ID NO:2393: (Length of Sequence = 337 Nucleotides)

TOCAGAGGOG GATTCAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TOTGCCTATC TACAGGACAT TGAGAATGCC
TATAAGAAAA CCITTCICCC TGAGATGAGT GAAAAATGIG AGGNITTACA GIATTCIGCA AGGGAAGCIC AAGATTCAAA
AAAGGTGGIA GAGGACATTG AATACCIGAA GITCGATAAA GGGCCCGTGGC TCAAGCAGGA CAATCGCACT TIATACCACC
TGCGATTACT GGITCAGGAT AAGTITGAGG TGCTGAATTA CACAAGCAIT CCIATCTI'N TNCCGGAAGT CACCATTGGA
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGITTA TITTATATAC AAAGAATTAT CATGGITTIN CATTGAGTAG ATGCCCCGGA TAATCCTCTG AAGGAAGAGC
ATTTAGTCCA ACTTAATGAA ACCGATATCC TTCGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG
GATCANACCG TGCCGGTTTG AACAGACACG ACAAGAGCGA GAACCCTGGC C

SEO ID NO:2395: (Length of Sequence = 335 Nucleotides)

CIGAAAGCIG TAACACCCIC AGGIAATAAC AAAAGGGATT TITATITCAC AGCIAAAGGG AAAATAGGIG GAGAAGITAA
AAAATAATGI CIGATCCIGI TCCIAAGIIC CAAACTATAG CCAACACTCI GAIGCIGCIC TITITCIIGI AGGACCAACC
GICCCAGITI GCCIGGGACT TICICATITI TACAGAGICC CAAATCCIAG GAAACIGGAG CAACIGGIAC AACIGGICAC
CIACICTIGC CCCICTGGIA AATCAAGNCA ACIGIGACCA TCCAATGIGC CATCITACAG GGNAAAGITA TAACCCACTA
TTCCCCTATA ACATA

<u>SEO ID NO:2396:</u> (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCCTGCAGC AGCACAACCC TGCACACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA TCGCCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG GTCATGTATG TGGGATTACA TTTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEO ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTIGCTINT NCCTAAAAGG AGGAATTGGA ACTAGAATGT GIGACTCTGT GGGGACTGCA
TAGGITTGTT AATTGACCIA TAGCTAAACC TTAATGTGTT TGTGTGTCTA TACATTGCTT TCCGCATTTC AAGACATCCA
GACGCTATTA CCCAACATTTT CCTGTGCATT AACCTCTGCA TGTGAAAACT TTTAACAGTT ACTGAACTAT GTAAATATGT

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GAATTITTIT ATTIAGGIGG ATGCATTITT NGICTGITTA CIGCICITCI CAGCITTATI CAATAAACIT GCATTITAAG GGITGIATIG GCAATTITAA CITAAAATGI GCATCATGAI GGAAGGIGCA GACCITTIT

SEO ID NO:2398: (Length of Sequence = 421 Nucleotides)

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTCAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTC TCTACATTGC
CTACAGTGAC GAAAGTGTCT ACGGTCTGIN AAGCTGCTGC CCCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG
TGGCCCCCCT TTCTTGACCT CCTCCTCCTT CAAGCTCAAA CACCACCTCC CTTATTCAGG ACCGGCACTT CTTAATGTTT
GTGGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAATGGTG GAGTTGGCAT CTTGTAACTC TCCTTTCTCC TTTCTTCCCC
TTTCTCTGCCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEO ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACAA GITCTGCCTN AAGTGCGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGCC ACGCCGAGCA TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTCGGAC CCAAAGGCGT GAACATCGGG GGCGCGGGCT CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGCAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCG AGCAGAGGAG CGGAAGGCGA GCNGCCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTCACC ACTTTCACCG GGGAGCCCAA CACGTGCCCG CCCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCCTCCAA GGAAAATAGA GCGATTTACT CTTCTCCAAT CAGTGCATAT
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG
CAGATGTCTA CTTGGAATAT ATTCAGCGAA ACTTACCTGA AGGGGTTGCC ATGGAAGTAA CAAAGACACA ATTAGAACAG
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

SEO ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGI GACCIGACCA COCTAACATC AGCIGCATAC CAGCAGAGCC TGACTGITCA CACAGGAACT CATCICCTCA GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GITTGGACCC CAAGIGCTIA CGACCCGGCA CIACGIGGGC TCAGCAGCTG CTTTTGCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG TCCIGGIGGI GCCTATGGGA CIGCTCAGCC CCCACCTCAC TATGGGCCCA CACAGCCAGC TTATAGICCT AGTCAGCAGC TCAGAGCTCC TTCAGGCTCC TCCAGGCTCA CTTCAGCCCAC AGCCACAGGC CIATTGCTGI GCATGGGCCAC TTITT

SEO ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTITATIIG TCIATAATTA GGGTAAACAG TTGGGTAAAA YCITACIAAA AGAAAGITAA GGTTGTCTTA
ACACAAGATA TATAATCNCA TAAATYAGIT AATTAAATTI YAATTAAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEO ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTCACC ATGAGGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAAA CATCCCCTAG AAAGGCCTCC AGAGAGGGGCC TGTGAGGCTC ACCCTCTGCC GCGCTCAGGAA GGACCCGCCG GCTCAGCCCT GGCCCCTCCA CTGCAGCCAT GGGTGGCGCC TCCCCCCTACT GCCTGCCCAG GGCTCTGTCC AGGTTGCTCT TGATGGTGTC GAGGAAGTCC GTGGTGTTCA GGAAGTGCTC GTTCAGCCTTC ACATTGCTGA GGCCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

AINENTITIGE GGICGCNAGA AATGGATGTE CGGAAGAAGA AGAAGAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC AGGGCCTGTE GGGACAGAGC CCACAGTGGA GACACTGGAG CCTCTNENAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA AGAAGCCCAA AGGGAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEO ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTTCAAG AATTTCAGAC CAATCGACCG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA GGCGTTGCAA CAAACCATAT TGGACAGACG ATGGGGGCGGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG CGAATCAGCG GCTTTCGGGA ATACATTTTT CGGAAAAAGA CTTCTTCCTC GGTTTTCTGC TCTGCACACG TTGAAATTTT

CCCCAGTITT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCCTC CCGCACCAGT TGGGCGCTCC CGGATGATGC

SEO ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTCG AACGGAGAGA GGGTTATCTT GTGGGGGGCT

ACCCGTGGAG AGCAAGGCGC CCCCAGGGGT TGGNTCGGTG AAATTNAGGT CGCCC

SEO ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GITCTCTTGT CCCCCCAACT TTACCGCGAA GCCCCAGCCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC

TGACGGGTCC AGATACGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG

CCTCTINTCTG GCTCCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGGGGCA CCGCTATCGG AGTCCTCAGC AGCTGTCCCC

AAGCTGGAGA AGCGACCCTG CTGGCCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC

CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TECACCETE CACCAGGICC COGIGIGAT TGINACAGNI ACGIGGGINA TGAAGGIAAC CACCIACCGN GIGCACGIGG

CONAGCAGCA GGACGIGCAC CIGACIGINA CGGAGICTCG GCAGCATGAG CICTCGCCAG ACTCGAACIT GCCCGIGCAG

CICCICACCA TCCGIGIGGC CAGCACCAAC CCIGCTGIGC AGGCCITIGA CATCIGGCIG AACTCCACIG AGIACGGGA

GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGIGGTCA TCCACCAGAG CCIGGGCGAC CINTINNIGG

AGACATTIGC CICCCTGGIA GAGGICAACC CGGCCTACTC AGIGCCCAGC AGCCAGGAGC TGGAGGCCTG CATAGGCTTG

CATGCAGACA CGIGCCAACG TGAAGNIGGI GAAGACCTGC CAGGAGTCAG CCACAGGGGA GITCCAGCAG TNITAATTNC

CGCCCCATGI TGGTGGCTTA ACTTGATNGG GAAAGTGGNI TNGNCAAGCG GCAAGACCCC CTTGGGNCIT NAAACTTGNI

TGGCAAAACGG GGINCCTGCA TGG

SEO ID NO:2413: (Length of Sequence = 203 Nucleotides)

TOGTOCTOCC ACCOCCTAGO CATGCAGNEG TGAATNEGGG AACOCAGGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG

GGAATCCACG AGGGTCTTC TACCAGGAAG AAGTGCCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG

GGACAAACGT TCCGTCTGCT CCCGAGTCAG GAGATCGAGT CTC

SEO ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGCCAGG ATGGGCCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTTGGACATG GAGGCCTGAC AGCTGTTGTC

CTTTGGGGAT CC

SEO ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGENCCA AATGCANCAT CTINATACAC GTGCTTAAC CTAGAANCGT GGCTCCACCG TGAATTCTAA

TTGGTCCGTG CTATCGAGGC ACTGTCCCCT TAACTGGTCT CGCTCCAGTG GCCCCNACTG CTTTTCTTCC TCTTCCAGNA

ATGGCTCTTC GGGCCCAGAG TTCGAATCTC GCGATCGGGA TGGGGACGGA GTACCGGCCT GGGGTGTCCC AGAGCCCGGA

CTGAGCTGGG GAGTCAAGAC CTCGGGGGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCTTCCC CAGCTTCTCC

TGTCTCCAAT CTGTTGGGTT CTTGGGGTTC TTCGTCTTCC AGCGGGTGG AGCTGCTGGT GGAAGAGTCC TCCCCGGATC

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

ATGIAATACA GIGIAGAAAG CGATCATGIC ATAAGCAATG ATTCIGIACA ATCAINCNGC AGAAAATTAG TITTGGAGAA
TICTIGGIAA TIGAAGACCA GCAGAGCACC CCCCCCCACC CGCCCCCTAA AAGIGCTIAC AATTIACAGG GATYCTITTC
TITTICAAAG ACCCAAAGAY ACGIGGICAG AAAAMAAAAG CITGAAGICI CAATGCCTAA TGICGIGCAC ATTKNACAGG
GACGC

SEO ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGITTIGCAA GATGAIGGAA CATCCCATAA GCCCAGGIGI GCAGCIAACC TITAGAAGCI GGAAAAGGCA AGGAAACATA
TICIGIAGAG CCICCAGAAG GAACACACGI CIGCACACAC TITGITITIA GCTCAGIGAA ACIGATITIG GACTACIGAC
CITCAGAACI GIAAGATAAA TICCIGITGI TITACGITIG TGGIGITATA GAAGTTACAG AAATGAATAT ACITACOGIA
GITTAGAGAG AGATGGGAGG ATACTITTIT TICICCCITC TITTIGAAGG GAGGIAGGIC TCCITAACTC CAGAGGAAAG
ACITGICTIT CITCATATAG GGGCCCTTIG ATICITAATI CATGGGAGII GITTAGGAGA TIGA

SEO ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGCTG CCTTGAGGGG GACCATCATG TCGGAGACCG CATTGGTGCA GGTCTCACCC CACAGCCCAT GCCCAGCCTC CTGCAGACTC AGGTCATCCA GCTGGTCGAT GGCTCTTTGC ATACCTGGTG CCTTCTCCTC TCGGGCTTGG CAGGCTTCTC TEGEGECITC TCAGATEACT CITITECCIT CITCICTGIC TTGGCTAACT CCTTGGCCAG CTCTGAACGT GCCTCCTTGG CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCCTTGCTA TCAGCCCCCT GTTTGATTTT GCTGGGCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGGCCACAGG GTAACGCAGG AAGTCCAGAT GCCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTTTTGGGG AGCATTTCCT GGAAAAAGCA CACGCACAAT CTTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTTAGGG CACCGAGATC TCAGCCTCCT TCCCATTGGG CAGCACGATG CCTGINITGG CTTTACTATT GCCTGCCCAC TTTTGCATGA GGAACTGCAT CTCCTTGCTG TCCTTGACAG GGTTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTGGAAGAGG GTCAGTGGCT CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGGTTTAAGT GCTGCAGAGT GAGGCAGGCC TOCTCAATGC TACGCTTGGC TITCCGGGGG GCATCAGGAA GCCGCAGCTT CTCAGGCAGG TTGAAAAAGA CAACTCCAAG CTCAGGANAG ATAAGGITCT TCACCCAGIC GCIGIAACTG CTAGAGCCCT GGNACTGCTC CTCCTCTAGC TCTGCCACTT TECECTECAG TAGTCCATTE ATECCTESCA EGITETCTEC CCCAATETET GINAGTAGCA CCEAGTCAAT GCEGTCCAAG TNCCGFACCA GCTTCCAAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTGA CAGCAAAGAG GGCAGAGTCC CCACGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCCGTC CATGGTGGGC AGAGIGGGCT CAGGGITTAG COGGAGGIGC AGGGICTCTT GGGAACTGGA TAATCCCAGG TGGCTCCAAT CACCTTCCCC TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGGTCT CTATTGCTGA GCAATTGGGA AATCTGGGG TTGTGAAGGA CCTGGGCAAA GITTICATAT GAGIAGGIGC CACTCTGIAG GATGAGGICT CCCCCAGGCT CTAAACTTTG CCCACTCAAG ATTAGTAGTT TATAACCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA CCTGATGCTG TCTGCACTGG GATTTACCAG GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNIGCTCACT TCATGGGCIG GCCTGGAATT GACGATGGIG CAAACCCAAA TNATCCTGAT
GIAATTNATG AAGATIATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CITCCACAGA
CGTCACTGAT AAAACCGGIC GGGAACATCT CTCGGTCTAT GCTGTGGIGG TGATTGCNTC TGTGGTGGGA TTTTCCCTIT
TGGTAATGCT GITTCINCTT AAGITGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTTG TTTTGTTTCA TAAGATCCCA
CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGIG CTTGTTGGTT GATGCTGCCA TGTAAGCTGG
ACTCCTGGGA CTGCTGTTGG CTTATCCCGG GAAGTGCTGC TTATCTGGGG TTTNCTGGTA GATGTGGGG GTGTTTGGAG

GIC

GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACTCTCA GGCAGCTAAG
CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCTNTTC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCATT
GGATTGTACT TCTNINCTGA AAAGTGTGCT TTTTGACCCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA
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ATATTINNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides) GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCACG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC TTIGCIGCTG CTGGATGTTT GCTGGCTGCA GGTTCTGCTG CTGCATCTGT AAGTTTTGTG GCTGCACCTG CTGGGTCTGC ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCCC TGGCAGCAAG GCTACTETEC ACCEGECCTA CCATECCATE CTECAGGGAG GGGGCCTETE TECTCAGGGG GCCTGGTGCC ACACTCCCCC GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCAA ACTGGTGGAC COGNOCACAG TGAAATTCAG GGCCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCACGTTCA GETINOCONAT GCCCAGGTGG GTGTCGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGAG GECAGNAGTIG GCGGCGAGGC CACGTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGCGAGA GCATGCCGGA GCTGTCCAGC AGGCAGNCCT TGCCGTCCTG GGACTTCTTC CTCCGTGCCT TGAGGTCCTT GGCCTCCTTG CTTCCACAGG CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG CAGAGCENEG GOGACAGGGT GGGCGTGCCC CCCAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAGGTT GTACTCGTCC AGCACCTCA CHATGICGTG ATGCATGCNC TCCTNTGCGA TGTCGCGCGG CAGGCGGTCC ATATGATCCG TGATGTCCCG GTTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTCGTAG CTGCCCTCCC GGGCGGCCAG AAACAGGGGT GTCTCCTCCC TGTTGTTCTG CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACTGCG GCATCCACAT TGTTCACNGC GGCGCCCCAG TECAGGEGGG ACTIGCCCAG GINATCTACG GCGTTGACGT CGGCGTGTGA GTTGATGAGG TCCTCCAGCA TGCCCTCCAC GECCAGGOGG GCAGCCAGEN TCAGTGGOGT CGTGCCATCA TGCATGCGGG CATCCAGGTC TGTGGCTCGG TTCCGGATCA GGATCTTGGA AGACACCTTG TGCGTCGGCA GACACAGCCG CATGCAGCGG GGTGCGGCCC ATGTTGTCCT GGATGTTGGC ATCTGCCCTG GCCTCCAGCA GGCGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGGCG GTCTCGCCCG INCOGTICTOT CTGGTTGTCC AACCTGGCGC CCTGGTAGAT GAAGTCGGAG ATGACGGCCG GCGCGTCCTC CTCTTCCTCG CTGTTGCCCG TCTCCAGGCC GCCCCCGCTG CAGGAGGCGA TCATGAGCCG GGTGAAGCCA TCAGGCCCGC GGACATTGAC GTCCATGCAG TCGGCGTCAA CCTCACCCTG GGGCGGTGTG GGGGCCATGG CANACATGCG CAGGTCAGCG GCATCCAGGT GCTGCTGAGT CCACTGCCGG TGGTCTGTCT GGTCGTCCAG GTCAGGCAGA ACCACGGGCT CCTCGAACCG GAACTTCTTG

ANTCIGGGAT TGGCTAAACT CCCATAGIAT TIATNGIGGC CGCCGGGGG GGCCCCAGCC CAGCTIGCAG GCCACCTCTA

GCTTTCTTCC	TACCCCATTC	CCGGCTTCCC	TCCTCCTCCC	CTGCAGCCTG	GTTAGGTGGA	TACCIGCCCT	GACGTGTGAG
GCAAGNTAAG	GCCTGGAGGG	TCAGATGGGG	AGACCAGGTC	CCAAGGGAGC	AAGACCTCGC	GANGCARGCA	AGCCCCINGCC
CITCCCCCGT	TTTGAACATG	TGTAACOGAC	AGTCTGCCTG	GGCCACAGCC	CTCTCACCCT	GGTACTGCAT	GGACGNAATG
CTAGCTGCCC	CTTTCCCGIN	CTGGGCACCC	CCAGINICCC	CCGACCCCGG	GICCCAGGTA	TGCTCCCACC	TCCACCTGCC
CCACTCACCA	CCTCTGNTAG	TNCCAGACAC	CINCACGYCC	ACCTGGTCCT	CINCCATOGC	CCACAAAAGG	GGGGGCACGA
GGGACGAGCT	TAGCTGAGCT	GGGAGGAGCA	GGGTGAGGGT	GGGCGACCCA	GGATTCCCCC	TCCCCTTCCC	AAATAAAGAT
GAGGGTACTA	AAGTTGTCTT	GGTTTTTATT	TIATTATTAT	TTTTTTCTTT	TTCCAGTATA	CTAGCTTGTC	TTTTAAGAAA
GGGGATATTA	АААААААА	AAAGACAAAA	GIGITTTIAA	AAAAAAGCAA	CACCCACACC	TEGIGICIGI	ATATAGTCAG
CTTATCTCGT	GITCAATCGT	CTGATCTCTA	CAGAGAGAAG	TGGAAAATGC	TGTATCAAGG	GTGGGCTTAG	CIGIGCCITT
CCAATAAAGA	TG						•

WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

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or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucletides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

- 5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.
- 6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.
- 7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

- 8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.
- 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.
- 10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

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SEQ ID NO: 316 - 2421;

or a polynucleotide complementary thereto.

- 11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.
- 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.
- 13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.
- 14. The polynucleotide of Claim 10, wherein the SEQ ID NO. is 2001-2421.
- 20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.
 - 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.
 - 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.
 - 18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.
 - 19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.
 - 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

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- 21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.
- 22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.
- 23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.
- 25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.
- 15 26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.
 - 27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.
- 28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.
 - 29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.
 - 30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.
- 25 31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.
 - 32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.
- 33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

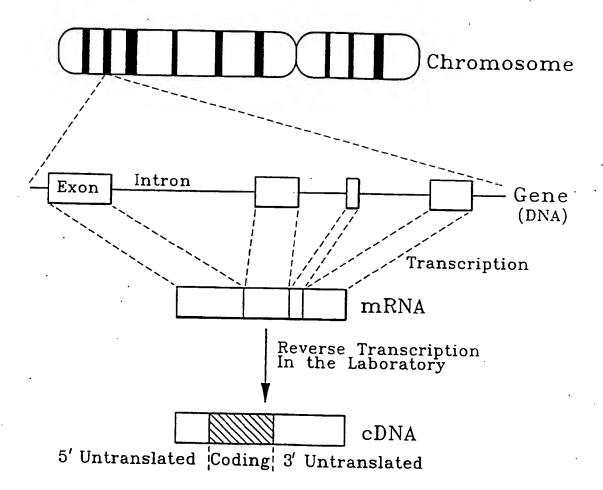


FIG. 1

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